

aggatgcgaa cggaagag agggcggaata aaacggcaag ggtgaactgg acgagaggaa 180
aacgagaggc taatggcaaa taatgtcatg catgagataa gagtttgtga tgggtacctg 240
gtatgttgac ttttgtgtag actccccggc aacagcgcca gaaatccttc ttgctacctc 300
ttgagcattg cgttggtttc ccttaaaaag gaaaggggtga tgcagtaaaa tagtgtaagt 360
atttccccca gtttttgata ac 382

<210> 8764
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-B10

<400> 8764

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ccgtcagtct gtggatctcg actccattgc tttccttttc gatggtcgta ggctccgtgg 180
tgagcagacc cctgatgagc tggagatgga ggaaggcgac gagatcgacg ccatgcttca 240
ccagaccgga ggggtgcttc ctgcacctta gaaggagctt gcttgacagcc tggctgttct 300
atgtcgtatg ctacctttag aactagagta aaatgtaaga agtgaaagaa cttgtgaggc 360
tatggttctg tgccataacc tgaggggggt 389

<210> 8765
<211> 350
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-B11

<400> 8765

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atcaaggaca agatcagcgg cgacgaccac ggcgacggca agaaggacgg cgagcacaag 120
gagaagaagg acaagaagaa gaagaaggac aagaagcacg gcgagggcca caaggacgac 180
gacggccacg gcagcagcag cagcgacagc gacagcgact gagccagctc cggccgcgtg 240
cagtgcaggg gagatgaacg cgtgggttaa cttggagcgt gtggtagcat atgtatgtaa 300

tgcttgacat gtctcatgga tcttgtaatg taataaccgg ctgcactgca 350

<210> 8766
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-B12

<400> 8766

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agtccaacct atggctagca tgtctacatt acaagtaagg tcacttaatg ccatgtgtaa 120
tgttgagatg ttgccatcac tttcatgctt tgaagttttg cgtgtcctag ctttggaagg 180
cccctatgat tcacaccatc ctagtcatct tgagcatggt ggaaagttag ttcacttgag 240
gcacctcaaa ctatcgagca tggatatcgg tgagctccca aaggaaatag gatattctaaa 300
gttcttggtg gtattggact taggtagaaa tagcataagt gaacttccag agagtattgg 360
ttgactaagt caactcaagt gcttgaacat atgcgaaaca ga 402

<210> 8767
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-B2

<400> 8767

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ttctgcaaga tatcaagcat cagagaagag ctttcagggc agtagagttt atccatgaga 180
gtagaagaca taatggagag gcgcatgctt tagctaaggc tgccgcatca ctccctcccg 240
ggcgccatgt gtggctttct tctatgcccg atattatctg tattccaatg acagtttatg 300
cttaagaaag gatacagatt atgctaaaaa aattgtcttc tttaacgcgt taaaaatata 360
atctttaaac aagatgtcgc ttaacaaaat atcgcatttt ttgtc 405

<210> 8768
<211> 363
<212> DNA

<213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB104-053-Q1-E1-B3
 <400> 8768
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 tgtcngcccc caccgggggt tcctcttctc gggccacaac gttgtctgga tcacctctcc 120
 atgcaccatg ggcgtctaga ggtctgcgaa cgtctcttca ccgcacatga ctgctagtac 180
 ctcgatcatag ttgctggagg agtaggagcc tcgcttgaat tgctaaatgg gtagagcttt 240
 caatgaagtg gtggagcggg tatgtaggtt ggcagggtgga gatgaggaca atcacctatg 300
 tacatggtgt tcgcatgacg gtcgcccccc taggcaaggg ggcattgtgt anggcccatg 360
 cat 363

<210> 8769
 <211> 404
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-053-Q1-E1-B5
 <400> 8769
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 caagcatgag aacctggtag aggctggcgt catcgacccc gcgaagggtga cgagggtgtgc 120
 cctgcagaac gcggcgtcgg tggccggaat ggtcctgacc acgcaggcga tcgtcgtgga 180
 gaagcctagc aagaaggccc ccgcgcccgc cgggatgccc cagggcatga tgtagaagcg 240
 caatgatagc tagcaacctg ggggcatgca attttagggg cagtgggagt gatcatttct 300
 ccaagggaga taactgtggg tacctcgaga aatcattggt gtgtaatgga tagtgatgac 360
 ctgttctatt gtctatttgg taccgctaata accgtgaaaa ctat 404

<210> 8770
 <211> 406
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-053-Q1-E1-B7
 <400> 8770

ccgggcccgc gatataacca acatgcttga cttcagctct gaagacatcg atggcatgga 60
 tgacgatgta ggagacgaac aggaaccagc acctataggg cgctggaagg ccacctcgtc 120
 atatgacata tatatggtgg atactccaaa agatggagat ggcatggaa cagtggggga 180
 tgacgcccc aagaaacagc cgaagcgccg gcgtcagcgg cgccgctcta aatcccccca 240
 aagaaaaaaa cgggtgattct ggcacgggag ataatactac cccggatagc gccgaagaac 300
 acccacctca gcaagattca gcacaggaag atggagaagc cagccctcat gagagagcgg 360
 cagaccgaga ggtcgaggat gataactata cgctccctc cgaaga 406

<210> 8771
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB104-053-Q1-E1-B9
 <400> 8771

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 cggccaacgc gctcactagc ctcccgctt cctccacatc tctcgcctc caccatcc 120
 agttcgtgcc attcgtgct ccaagacaag ggcattggcg tcggcggtg cggcaacgaa 180
 gctgatggtg cagagccaa ccatgaaggc agtagcacgg ggcagcgaca gcagcatgga 240
 gggcgctctc ttgtttggga aggtaatgga actgcaaata ggagtggcag cggcgaccag 300
 gatgcaaatg gaagtggctt ccaaagacct tggaaagaaa tggcacgtga gcaaaggata 360
 tcaagaagct tttgatgtt gggaagcttg gagctgatgc ttcanataag ctgatggttg 420
 tcttttggct gtactggact atttaaac 448

<210> 8772
 <211> 414
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-053-Q1-E1-C10
 <400> 8772

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aaccaatata aataaataat gagtacaata cattaccttg aagtgggtgtt ttgttttctt 120
 togctaacgg agctcacgag attttctgtt gagttttgtg ttgtgaagtt ttcaaatttt 180
 gggtaaagat ttgatggatt atggaacaag gagtggcaag aacctaagct tggggatgcc 240
 catggcacc ccaagataatc taaggacact aaaaagccaa agcttgggga tgccccggaa 300
 gacatcccct ctttcgtcct catccatcgg taactttact tggagctata tttttattca 360
 ccacatgata tgtgttttgc ttggagcgtc ttgtatgatt tgagtccttc cttt 414

<210> 8773
 <211> 426
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-C3

<400> 8773

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 gggggaaaga ggtagcaaag caaccgtgag tactcatcct aagtactcgc aagcatcaga 120
 tctatactaa gtatgcattg gtatcaaattg gaaagggtgt atctgtgcac tgaactgcag 180
 aatgccagaa gagaggcgaa agcctagcct atagaagact aggatcttga agcagctcca 240
 agcatcttgc aatatgtaga agagtgtgac accccaaaag tttggccttg tttttagtta 300
 ttaaaatgtt gccaggaaat aaaacttttc caattgtcaa gttttaccct tttgtgattt 360
 tggatttatg cctcttgtgg gaaaaaactt caaagtgtat ctttgacttg tgtgccctct 420
 taaaaa 426

<210> 8774
 <211> 413
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB104-053-Q1-E1-C4

<400> 8774

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 tacaagaccg tcctcaggac cctcaggaac tccaaggcaa agcttgtgat ccttgctaac 120
 aactgccctc cgctccgcag gtctgagatt gagtactatg ctatgttggc gaagatcact 180

gtccaccact accatggaaa caatgttgat ttgggaactg cgtgtggtaa atacttccga 240
 gtctgtgcc tgagtatcat cgaccctggc gattccgaca tcatcaacgc aacaccagct 300
 ggccagtaaa cctgtgtatg ccattttcag tgtctcgtct gatgcgtcat ctaagggtgg 360
 tctagagtgt anttcttgct ggacttgatt tggctcctgtg tacatcattt atc 413

<210> 8775
 <211> 181
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-C5

<400> 8775

cccacgtcgt tgcttccttc atgtggatat tcttctagta ttacagtgcc tcccttgat 60
 atatcttcgt ctgcttgca atctcttgac caccacgtgg gtttttattg ttagttgata 120
 tgtggtactg gagatactga ttactgaacc gatctcttggt ttggaaaggg aaagcgcgat 180
 g 181

<210> 8776
 <211> 433
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB104-053-Q1-E1-C7

<400> 8776

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 gcaatgaggt tttcttccgc atcaagagat ccacacagct gaagaagctg atgaacgctt 120
 actgcgaccg tcagtctgtg gatctcaact ccattgcttt cctttttgat ggtcgtaggc 180
 tccgtggtga gcagaccct gatgagcttg agatggagga aggcgacgag atcgacgcca 240
 tgcttcacca gaccggaggg tgctttcctg gcccttagaa ggagcttgct gcagcctggc 300
 tgttctatgt cgtatgctac ctttagaact agagtaaaat gtaagaagtg aaagaacttg 360
 tgaggctatg gttctgtgcc atagcctgag ggggggtctg gangtgaaac aacatcgag 420
 tactggtgat gtc 433

<210> 8777
 <211> 396
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-053-Q1-E1-C9

 <400> 8777

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 agagggtttc aaaaacttat accaaaggaa tggattgata tgttcaatga acatgaaatt 180
 cagcttctca tatctggctc tttggaaagt ttggacattg atgacttgcg cttaaacc 240
 aactattctg gaggttatca tccggaccat gagattatcg atatgttggt ggagggttcta 300
 aagagcttca gttcagataa tcagaaaaag tttctcaagt ttgtgactgg atgttctcgc 360
 gggccactcc ttggatttga gtaccttgat cctaaa 396

<210> 8778
 <211> 406
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-053-Q1-E1-D12

 <400> 8778

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 aagaacaaga tgagggtctt gagaagctgg aacagacggt gctgagcaca aaacacattg 120
 cgctagcagt caatgaggag cttgacctgc atgcaagact gattgatgac ctagacgacc 180
 atgtggatgg tacgaactcg cgtctccagc gtgtgcaaaa gaggcttgcg gttctgaaca 240
 agcgcgcaa gggcggctgc tcctgcatgt ccctgctgct gtccaccgct ggtatagtga 300
 tgcttggtggt tattgtttgg ctccatca agtatctgta acctctgccc aactcaaata 360
 agtttcaagt gtgcagctct ttcaaagata gtatgggttac ttccgc 406

<210> 8779
 <211> 395
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-D2

<400> 8779

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tctttcgatg agatgataac tatcgatttg gtggagacga ctttgatgat ccgactacaa 120
acgtgcacga cgttgcgcct tagcaatcgc taaaccaatc tcctgagggt actgacgatg 180
ccggaagcac ggtcagcctg accacgaagg tctattctga tgaggacatg actaccttgg 240
atatgaccaa aaatattgca tatatgcata tttgtcaggt gatttctagt gcaaactatt 300
caataatcta tttatgttat ccagaacaaa aatacttcac acacttttgt gttttgtcta 360
attgcaggtg tatgggacat ttgtacaatc cacat 395

<210> 8780

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-D4

<400> 8780

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ttcgaggaca tgatgaagga gctggaggcc ctgtgcaacc ccatcatcgc caagatgtac 120
caggggtgctg gtgccgacat ggagggcggc atggacgacg acacccagc tgcacccggc 180
ggccctggcc ccaagatcga ggaggtcgac taaacagtca gttgttctgt tgcagaggcg 240
gcgaagcctg ctgcttatta taccgtgtct gtgttatctg agacttgagg ttgtggtggt 300
tattgttttg cttccgagtg gtcggagtta ttccgtgcga gttgcaacat tcgtggtagt 360
ggatcaacgg ttatgatgtc tcacgtcaaa gtata 395

<210> 8781

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-D5

<400> 8781

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gctcgtgatt ggttctgagg cgcccttcaa agtcaagggg ctgtggctct tccgtgggca 120
ggacatccct gagttcgtca tgaatgaggt ctatgacatg gagctctacg agtggactaa 180
ggttgacctc tccgacgagg ccagaagaa gcgtgtcgag gccatgatcg aggaccttga 240
gccgtttgag gggcaggcct tgctggacgc caagtgttc aagtaagcga acagtgcctg 300
ggatcgtgat ggcggtggca aagaaactat ctaggacttg aaattcagtg tcgaaacagt 360
tggctctttt tttggaagag tttgcttgtt acttaatggc tatttgacct ggtgaactag 420
ttaatt 426

<210> 8782
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-D7

<400> 8782

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ggttcagtgg cgccttgtcc cgtgctctgg agcttcttca ccattagaag aactccaca 180
gggcgtagat tgtttacaag ataattagtc aagtgtttta ctactgcagt aaaataaagg 240
gtctggctaa atcatgtgtg agctgttggc tcgctgtcac acggtcagaa ggcaaattcg 300
aaggctaata tagggactaa actctctcac tcaactaagg attagcaatt ccataagata 360
tagtgaaaca taacacaaat tggaacaacc aaggttgaat caggtatctc ttcagat 417

<210> 8783
<211> 384
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-D9

<400> 8783

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agtttcactt cacatcgtga tggtgtttta cctttttttt cttgtcgctc tcccgctgcc 120
tgctataacg gacagcgctc cctgttggcg ccgcccggg cgggggtggt gccctggcgg 180

cggaggggtgt atgtcctctg ccgccgggtg ctccctgct tgtacctaga tggttgggta 240
 ctctttccgt ccattgtcac cggctaacat tgtgataata tcagtctggg taatgttaga 300
 ttaagctgtt gtttgtgtcc caaaaaaaaa aggccgtcca tttaaaaaat tctaacagga 360
 aaaaaccgaa gagtcacgca actt 384

<210> 8784
 <211> 204
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-E1

<400> 8784

gtcggtattg cagatggctt ggcaccaaca ctgttcaatt cagctcccca gggtgcgttg 60
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 gctgatatac tcgctcatgg taatcacata tgggccgcat gggcacctaa tggaacagat 180
 gtattacact acgcttggga agga 204

<210> 8785
 <211> 395
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-E10

<400> 8785

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 gaggttttct tccgcatcaa gagatccaca cagctgaaga agctgatgaa cgcctactgc 120
 gaccgtcagt ctgtggatct caactccatt gctttccttt tcgatggtcg taggctccgt 180
 ggtgagcaga cccctgatga gctggagatg gaggaaggcg acgagatcga cgccatgctt 240
 caccagaccg gagggtgctt tcctcgccct tagaaggagc ttgcttgag cctggctggt 300
 ctatgtcgta tgctaccttt agaactagag taaaatgtaa gaagtgaaag aacttgtag 360
 gctatggttc tgtgccataa cctgaggggg tctgg 395

<210> 8786
 <211> 338
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-E11

<400> 8786

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ggtagcgagg aagcacgaat cggtcactgc agatcctgca tgggctgaaa ctttggaat 120

aaagtcaacc accaaggcaa ggttccccga atttaaaacc ttctttcccc cccccgtaat 180

tccactttga aattgtccat ccccaaatt tccccaaag gttccccaa acttttttcc 240

ccgtaaactc acacacccaa tgtgtgttaa atatcccctt tttccccgtg ttgccccgga 300

aattttcttc ccccaaattt ctctcacagg tttctcgt 338

<210> 8787

<211> 343

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-E2

<400> 8787

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attcttgttt gcttggacgg ttgagcccg ataatcgct tccactttct acccgccatc 180

tccgggctgc ccgggtgacc agtgtcgtgg agatggtggc tgccatgcag taagtcatgc 240

atcatgtcat aactagtga tgcacattgc atgtcttgaa taagacggaa gagtgtcttg 300

ggcctccgta tacaatgaga ttccctttca cacatgattt cca 343

<210> 8788

<211> 381

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-E4

<400> 8788

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cctggagaag ctgctggacc tggaggagaa gagctgccac caaatacaca aggagacgat 120

gatccacaag gcggtgctga gagcctgaag tgaaccattt tgaattgaat gtggccttgt 180
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 aaaactattc tctctgctca ggtgggcatc gcctgtttgc tttgggaact cgtgtgcgaa 300
 ccggtctcga aatactgtaa ccacagggaa tgacgaatgc tatttgctgt atttttctga 360
 acattatttg tattctttgg t 381

<210> 8789
 <211> 407
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-F1

<400> 8789

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 agttcatcgc ttcgtagctc gcgtagctga agccctcctc gggagtaacg tggattgtgg 120
 aggctgcagg gccgcagacg ccgttcatcg agtagccgca cgggtcgaag tcgaagtcgc 180
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 cagtcatgca catctcgagc gtcaccatgg gttgctcagg ctctcagtg gcgtagtaga 360
 cgtgccacat cttcttgggc ctgaacgcat caccatcac atatgca 407

<210> 8790
 <211> 379
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-F10

<400> 8790

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 gattgatcgt gagtcagcgg tgagttaatg ctggtaacgt gatgcttcac gctatagggc 180
 tcctgtggtc gcatgtgtcg gcgtgtctat acgatgcac cttacatacc cttgatcac 240
 acttgatagc gcatctatag tgtgtatcaa ttgatatcat gagtgcctgt tctacaatgt 300

ccagagtga aaaaggctga cataacacaa gatggtcacc ttgaaggaca tcacccttta 360
gacaactcgc gggttacct 379

<210> 8791
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-F6

<400> 8791

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gagggtcatgg catcttgagc ttgaggtatg cgtaatgcgg cactgtattg aattttgcaa 120
atattgtccg tccgagcagt gcatgatagc cactacgaaa cgggacgatg tcgaagatta 180
actcttcgct tcagaagttg ttcggtgatc cgaagaccac ttccagtgtg attgagcctg 240
tgcaatgggc ctctacacct gggatgacgc ttttaaagggt ggttttgctg ggtttgatcc 300
tcgagggatc gataccatt tttcacactg tatgctgata aagcaggttc aggctgctgc 360
tgccgtccat aaggactcga gtgaggtcaa atccgtcaat gatggggctc aaagacagtg 420
cggcggatcc gccatgacg 439

<210> 8792
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-F8

<400> 8792

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ttttaagata tttggttgtc ttgtaatcgg atatattatg cgctcgataa catctgggat 180
gaactaaact gagcctaaat aactggttgc tgtcaatttg cttggtatcg tcttatagtg 240
tggcaactga tgttggggga taatcacctc aactgaacgc tgccctttat aacaatgaat 300
agtctgggtt tgctgatgca cttttgttat tgcattgccc cactgaacag gcattgcaat 360
gatgtgatat tatgatatgc ttgacacaaa acaaatcaat tcaaataaaa aaaaaagcg 420

gccgctc

427

<210> 8793
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-G1

<400> 8793

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aagcgtcagg taaggtttct ctgctctgtc ttttacttat tgttttctat ttttttctgc 120
agctttgtgg ctttattaaa aatactaaat caatcccaaa aatcatgcaa ctgctcatga 180
ccactgtag aaatatattc tacagtaaac atttcagttt gggattattt gagcatttag 240
aatattttat agtattttaa tgcccaaag caaataagta atgattttaa ttcaaagtcc 300
caaaaataaa tcctttttaa atgttcatta ttttttgttt ggatgaaaac ccttgccaaa 360
aatattaaac atctaaggag agcattttgg agcaatgaat gagaattaag gttttt 416

<210> 8794
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-G10

<400> 8794

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atcgtgcatg gcatgctacg tcgttgctgc tggacgtgta gtttagagaa agaaccatt 120
tcatatatag aatagatagt gaaacaaact agtaggaaaa aaagaaatgg caaagaagca 180
taccagtcta acaccagcgt caggtatttc accttgagac agcctatatt catacatgac 240
ccagtcggtc cttgtaccct tgggcgcctt gccagcgtga aacaccaggg tcctcttcat 300
cccaacagtg cgattttcat acaccacctg cctgtccttt ccagtagcct tccagtagcc 360
accttcggtt gaacggtag ctctatgccc aac 393

<210> 8795
<211> 413
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-G11

<400> 8795

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attcacgggt cgacgggtca tgtcaatggc taggaaactt aaccatcttt gattcaacga   60
gctagtcaag tagaggcata cttgtgacac tttgtttgtc tatgtattca cttttgtact  120
aagtttccgg ttaatacact tctagcatga ataataaaca taggccgcct ccacctctct  180
cccactaagg cccaataagg ccatacact ccccgggggg ttccggtaac ctcccggtac  240
tccggtaaat gcccgaaccc acccgggacc attccgatgt ccaaacaatag ccatccaata  300
tatcgatctt tatgtctcga ccatttcgag actcctcgcc atgtccgtga tcacatccgg  360
gactctgaac aaccttcggg acatcaaaac acataaactc ataataccga ttg          413
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<210> 8796

<211> 232

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-G12

<400> 8796

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ggggtagcgt acctgcatgc gtgcgcaagt tggtaggct atgcatggcg tcagttacct  120
ggctaagttg ttacgctacg tgcatgcac gcattggacat ggggtgcatgt ggttgagata  180
ttctaggcgg tgactgtccg tgtgtgtgca tggatatagt ttgctagact cc          232
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<210> 8797

<211> 422

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-G4

<400> 8797

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actgagcatt tgctcatgga tctgtgtttg caacagttct ttgtgtcaaa gaaacagaat  120
ggggcgtatt taagaagttc ttcaaagtgt gttgggaatt ttacctcatc aattacactt  180
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tggcggttctg gggagccgaa ttttggtggt gtttcacgtg atttgatagc gagtgtctgt 240
 ctatcttctt tctttagtgc cagtgaaccc aatgcgccac caggatttgt tggcatgaaa 300
 gcaatcaatg ctactagtgc tgtgcgtact gcaacacgaa tagtttggct cagatgtgta 360
 tacatcatat gaacaagaaa aaggaaaagg aaaagaagac acatataatt aatataacac 420
 ac 422

<210> 8798
 <211> 430
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-053-Q1-E1-G6
 <400> 8798

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 caaggctgat tcctcttatt tgatcaacca ttgcgcgtgt caaaaatgca gagggggatg 120
 caaggagcac aaggcctgca catccaagca agtggttaaca tggacttgta catggaacat 180
 cccaagcgca atcaaagctg cagtgagcct gtacaacgag ctagcgtaag tccttgcatt 240
 tcatttaatt cgtactggca ttcgtgtatg atttgtgtgc actggctgat ccacgaattt 300
 aagttaccag gggcgaacat ttaacttaaa aaatacgaag gcacttgcac tctggaaatc 360
 aacataactt gagaaatgtg aagctacatg caccttgaga actagctaata gatccaaagt 420
 aattcggatt 430

<210> 8799
 <211> 429
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-053-Q1-E1-G8
 <400> 8799

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 ggccaagaag agcgtggaga cgtacaagat ctacatcttc aaggtgctga agcaggtgca 180
 cccggacatc ggcattctct ccaaggccat gtccatcatg aactccttca tcaacgacat 240

cttcgagaag ctcgccgggg agtcggccaa gctcgcccg tacaacaaga agccgaccat 300
 tacctcccg gagatccaga cctccgtccg cctcgtcctc cccggcgagc tcgccaagca 360
 cgccgtctcc gagggcacca aggccgtcac caagtttacc tcctcttaga tcgcgtcgcc 420
 tgtatctag 429

<210> 8800
 <211> 356
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB104-053-Q1-E1-H10
 <400> 8800

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 acttatgtca ccacanacag aaactaaagc aggtgttgga tttaaagctg gtgttaaaga 120
 ttataaattg acttactaca cccagagta tgaaactaag gatactgata tcttggcagc 180
 attccgagta agtcctcagc ctgggggttc gccgaagaa gcaggggctg cagtagctgc 240
 cgaatcttct actggtacat ggacaactgt ttggactgat ggacttacca gtcttgatcg 300
 ttacaaagga cgatgctatc acatcgagcc tgttgctggg gaaaaacacc aatgga 356

<210> 8801
 <211> 381
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-053-Q1-E1-H12
 <400> 8801

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 aacaagctgt ggatcaggat gcttctgctg ccaaggtgga tcaaatagac atggagtcaa 180
 atgacatccg ccgcttcgaa cagttgagac gtgagttgat tgagttagaa aggagagtgc 240
 agaagagtac agatggtgct aaaaaagagg agttccagga aacggagggt ccagatgaaa 300
 caatgagccc ttctgagtca gcacccctc tgtcagggcc tcctgggttca gtaatcaaga 360
 aagaaaatgt tattacaaaa t 381

<210> 8802
 <211> 326
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-H2

<400> 8802

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 gtacaagatc tacatcttca aggtgctgaa gcaggtgcac ccggacatcg gcctctcttc 180
 caaggccatg tccatcatga actccttcat caacgacatc ttcgagaagc tcaccgggga 240
 gtcagccaag ctgccccgt acaacaagaa gccgataatt acctcgcgcg agattcagac 300
 ctccgtccgc ctgctctcc gcggcg 326

<210> 8803
 <211> 410
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-H3

<400> 8803

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 acccatacac tgggtctttg gactgcgcca tgcaaactt gaagaccggt ggccattta 180
 agttctactc cggcttcctt gtatattgtg tcaggatcgc cccgcatgtc atgatgacgt 240
 ggctcttctt gaatcaaac cagaagtacc agaagaagat cggcatataa gatctccagt 300
 tggagacaag agtaccaatc cttgttcgac acatttaata actttccagc agctttgcac 360
 tcccgtgggt gtttttggtta cacagagttt taagcaattt ttaccgtagc 410

<210> 8804
 <211> 410
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-H4

<400> 8804

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ataaaatacc aagatctgaa attcttaaatt gttagagagt cttcatatag ttgcataatt 120
attcgactac tcattgatct tcaattatat ctttcggagt agtttgttgt tgctctagt 180
cttcacttac atcttttttag agcacggcgg tggttttatc ttacagaaat agatgaacta 240
tcatgtgtca cttatattat tttgagagtc ctaaacagca tggtaatttg ctttggttat 300
gaatttagtc ctaatatgat gggcatccaa gagggatata ataaaaactt tcatataaag 360
tgcattgaat actatgagaa gtttgatact tgataattgt tttgagatat 410

<210> 8805

<211> 399

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-H6

<400> 8805

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ctcccccatg tgtccagcag ctgaggtttc accctctggc gccgccctga cggcctcctg 120
catctctccc tggcctggga tccttcggga caacacctcg gtgtcatcca tggccctggg 180
agaggaggcc gccggaaggg acccgctgtc catcaccttc ggggtccagcg aattccccga 240
agatgaggat cgctcaaagt cggaacgagc cggactacaa gtgcatgatt caacatgtta 300
aaactatgaa gtaaaaaggc tggatatatg aatgcgtcag ggtctttgag tactcatgat 360
tcggccaggg gcttatctcg ggggcgccgc tctgggctg 399

<210> 8806

<211> 284

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-053-Q1-E1-H8

<400> 8806

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gaagaccaag gccagggaaa ggcttatcgc aaaggaggct gccgagcgga tgaactaagt 120

ttagcattgt tgaaccatat ctattcctca tccttgagta gtgtgcaagc atactgtggc 180
 agtttggctc cagttttgaa agtcattttt gtttgtctga aacatcttgg aaagaacagt 240
 gtaagaatga agtatttctg tttaatgcc a gttagtattt ttgt 284

<210> 8807
 <211> 189
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-053-Q1-E1-H9
 <400> 8807

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 gcctcaacgg cggcctgcgc cacacacttc tgtcatgacg agacacgctc atctcatgcc 180
 aacgatatt 189

<210> 8808
 <211> 390
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-054-Q1-E1-A11
 <400> 8808

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 gcaaacggac cttacaattt tccggtaaat tttgggggtg tgaattttcc aagtttgggg 120
 taaaaatcca atggacaatg gaacaaggat tggcaaaagc caaaccttgg ggatgccc at 180
 ggcgcccaa aatgatcaaa ggacaccaa aacacaattc ttggggagcc cccggaaggc 240
 atccccctctt tcgtcctcat caaccggtaa ctttacttgg agctaaattt taatttacca 300
 caagatatgt gttttgcttg gagcgtcact tcattttctt ttgctttgct tgagggttga 360
 ataaaatattc aagatctgaa attatcaa at 390

<210> 8809
 <211> 408
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-A12

<400> 8809

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caacaaactt tggattgttc tggacatgtc ttggttcatt atttgaaaat ttgattgcta 120
tggtgttggt tgaggctggg ttgagcagag gaaaagttgt tccttttttg atgatcatgg 180
tgatactgct gtcacgttgc ttctttagt gagtagtata cacatggacc tgataaaatg 240
gtccttgata tgatggaatt agtagcattt gtgtggggtt aactgttgt gcctaaacta 300
ctatggttgc caagccagca tccattgcat caatcctcat gaattagtgg acaatgtata 360
gataaactct atggaacaat aatgatagt aatcagcaca atagttta 408

<210> 8810

<211> 414

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-054-Q1-E1-A3

<400> 8810

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aaaaatggta aattcaacaa agggcctgga attttggaaat tttgggttca acttgcaagt 120
aaccaaggta ctatcagtac ggattgcaga ctgcggggag gctatatata aattttcatt 180
cgctctgctt ttgaaattac tcctcgatgt tatgtgcaa ctgccaaccg tacgcctgaa 240
cgatgtttga ggcctctatt agaaaactgg aagttgtaac tttgtgactg gacaagtttg 300
tcgtaattag gatacaaagt tctttgttat gcaattctac cgttttttgt tgcaaaaaaa 360
aaaaaanaac taaaataaaa aataaaaaaa aaccaaaata tccaacacaa aaat 414

<210> 8811

<211> 243

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-A4

<400> 8811

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gcatttcatg gaaacaaaag cgacatccaa gattcattac tccaaaatct gtattcaatt 180
ctcagcacgt cgcctaagtg cgacatgctg caactcacag gggacaaaaa tgtccttggt 240
gaa 243

<210> 8812
<211> 477
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-A5

<400> 8812

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taaaacttttg caataagtat atgagttctt tatgactaat gtgagtccat ggattatacg 120
cacttttacc tttccatcat tgctagcctc ttcggtagcg tgcattgccc tttctcacct 180
cgagagttgg tgcaaacttc gccagtgcac ccaaaccgag tgatacgata tgctctatca 240
cacataagcc tcattatata ttcctcaaaa cagccaccat acctacctat catggcattt 300
ccatagccat tccgagatat attgccatgc aacttccatc atcataatat tcatgacttg 360
agcattcatt gtcataattgc tttgcatgat tgtaagatag ctagcatgat gttttcatgg 420
cttgtccatt ttttgatgac attgctacgc tagatcattg cacatcccgg tacaccg 477

<210> 8813
<211> 481
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-054-Q1-E1-A7

<400> 8813

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gaaggactat gatcctggag gttttgtggc ataatggagc acaaactaac atagtgtgctt 180
tntagctcac attatgtgtc cagaatcaag atttgatga tgcactcaca tggagtaacc 240

acttgaggta aaacttggca aggcttagtg acttggccag ataaaggtgc tataaaaatt 300
tcataccaat tggttttacc aaaatggtac ttccttcaca actatcttca ctggccagaa 360
tcttgcaaga attctagagg agtattggct aggttaaatt gtgcaaatt tgggtggagag 420
aagttatfff gtaggagaat actctagtaa attgtcaggc aaaatgaanc aatataaaat 480
a 481

<210> 8814
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-A8

<400> 8814

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aatcttcaac cagagggttat ctctacgat caatggaaag atcttaaggc agatacaaaa 120
ggtggacttt cgacatggat taaagggtgca tttcatggaa acaaaagcga catccaagat 180
tcattactcc aaaatctgta ttctattctc agcacgtcgc ctatgtggga caggctgcaa 240
ctcagagggg acaaaaatgt ccttgggtgaa ttcattggaat ttaaaagcaa gaatgaagac 300
attccaatcc tgaaaaaagt taagaaatta aaagttaacc caattgtcaa ccaaaaatca 360
actccttt 368

<210> 8815
<211> 481
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-054-Q1-E1-A9

<400> 8815

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caccttggtg ggttgtgctc ccctcggagg accccgcgac gcgtcatcgt gaccatttg 180
gtgtcttctg ctccaaacaa atcgcggtac agtttcgttg tacttggacg ctgttttgta 240

gtgatttcct gcgatgtaaa aaacatgcag aaagcagcaa ctggcacttg gcactatgcc 300
aatagggttag taccaaataa tgatacaaaa tgattataaa acatgcaaga ttgataatat 360
aacagcatgg aacaatcaaa aattatagaa aagttggaga cgtatcagca tccccaaagct 420
taactcctac tcgtcctcga gtaggtaagt gataaaaaca gaacttttga tgtggaatga 480
t 481

<210> 8816
<211> 481
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-B1

<400> 8816

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acgccggcgc tggctgctgc atccatctcg atctccggtg ccgcctttgg gccaggccgc 120
cggtggcctc gccatcgtat cccctccga cgttggtcat gggatgcagt cagcgggtcca 180
gctgcaggag gaacaggatg gccacatggt acacaaatgc atttatgtat gtgacaccta 240
cccaaaaacc aggttggccc accttcggcc ccagacggc ccaggggaat tgacgtctag 300
ttgtcgtca ggctggtcac aatggacaag aacataagct agtaacttac acactttcct 360
agactatatt actacctcca tagtgggtag gaacatctat gtagtgtcat gcaaagatgt 420
atttattagg ttatagactc attgtttctt ggagtgtgtg atgttccggt aacttagcta 480
g 481

<210> 8817
<211> 260
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-B10

<400> 8817

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tagacattgt tgcgtgtatt attatactta atacatgggt cactagttat attagggtgg 120
ttctgctaata gttattcttc tcgaactcgt gatcagtttt gactgataaa aatgtccagt 180

ggcttcgagg attcatcata ttattttatc atatgatatg ttttttttcc tattttttaca 240
 ttcgacagac tttgataatg 260

<210> 8818
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-054-Q1-E1-B11
 <400> 8818

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 aaccgcatga cgaactaccc ctctcgaggaa aacttgcaac ctccggcgcc gatattcgcc 120
 gacaaggccg ccgcgctcgc gtccctcttc gcgcgcctc ctccaccgcc tctcccgggtg 180
 ttcagcttct cggcggagcc caagatggag gaggcgatcg ggtcactgct gctcccgggg 240
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 ccgttcattgt cgctggacgc ggggatctcc gagctcggcg acgcgtcgcg ggccgattac 360
 tggaacggcg ggagctgctg gacggacgtc caggaccgtt ccgtctacct accctagttt 420
 ggcttagttc ctcatcacga ttgcctta 448

<210> 8819
 <211> 436
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB104-054-Q1-E1-B3
 <400> 8819

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 gagctttcaa gtactccctt catcctaaat tacttatcgc agaatggata taattttttt 120
 ccgaaaatat aagaaatgaa tgtatataaa actaaaagta cataaaaaaac gccacaaccc 180
 tgaggagcaa cgaatctact tttatcaagg attactactg actaactgct tcgtttttgta 240
 taatatcgtc atgtttacca ggaaagaagg gacgaaattt gcctgctccc ctgcgctgtg 300
 cccatccgtg ctcgccgcta cgtgggttaa tttgattgaa acaaaataag gcccgcccc 360
 acctcattaa aatcaggggg ggagataatt agattagaaa aaaaaaanaa aaactaaaaa 420

aaaaaaaaagc ggccgc

436

<210> 8820
<211> 435
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-054-Q1-E1-B6

<400> 8820

cggtcaggcc attccgggtc gaccggaatg gagcaaagat tggagctgta caatcgagtt 60
cctcccaatg gattggtgct ttatactgga gttttactat ccatagaacg catggagttg 120
gccggcagcg gcagagtatg ggagcagtgg tggcggcgtg gcatatcagc tctcctagag 180
tgagctagtt gcagtagagg ctaaggaaat gcagtagtga acaccaaaga aatagatacg 240
aaacgtccgc ccgcccgcgc caccgccgaa tctggcagca agcgdaccgc tgcggccgag 300
ttgcacaacc tctccgagaa ggcggtgtcn cgcttcnccg tcgttaacca cttttccctg 360
agtttcgccc cgcttttcta ctgtttcttt ctcgccttat tttcccggtc gctcattgct 420
tgcttgcttg attgg 435

<210> 8821
<211> 456
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-B7

<400> 8821

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accagggcaa ccgccaggtg accttctcca agcgcaagaa cgggatcctc aagaaggcca 120
aggagatcag cgtgctctgc gacgccgagg tcggcgctcgt cgtcttctcc agcgccggca 180
agctctacga cttctgctcc ccaggacct cgctatcaag aatcttgag aagtaccaga 240
ccaactccgg gaagatactg tgggatgaga aacacaagag cctcagtgcg gagattgatc 300
gaatcaagaa agagaatgat aacatgcaga tcgagctcag acacttgaaa ggcgaagata 360
tgaactcgct gcagcccaaa gagctgatca tgattgagga agcacttgat aatgggctga 420

caagtctgca tgaaaaacag atggagcact atgaca

456

<210> 8822

<211> 237

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-B8

<400> 8822

acggtcaggc tagtccgggt cgacgcgga cgcggagg cattcatata gagtcatacc 60

ttgggtctaac tatcaattgg aaatcctgga ttggtaatct atataaattg taagattcac 120

cataataaaa caatggccca atgtggagaa gagattatgg acaataagac ttccacacat 180

ctcgagatgg catccgactt tataaaaata aaagaggcca aagatgctca gcagctc 237

<210> 8823

<211> 482

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-C1

<400> 8823

tcggaaatca agggtcgacc ggatcgcggt tgctgtgagc aaactgagcc ggtttgtttc 60

caaaccgggt gatgtacatt ggcatgctgt tgagagaaag gtactatgaa ctatggactt 120

cactataccg gatacccgtc ggtacttgaa gggatatagt atgcgaattg gatctctgat 180

gctgatgaga tgaaggccac aactgggtat atgtttactc ttggagggtg cgctgtttcc 240

tggaagtctt gcaagcaagc gatcttaacg agatcgacaa tggaagcaga attaacggca 300

ttagacacat ctggtgttga agcgagatgg ctctgagatc ttttgatgga cttgccattg 360

gttgataaac cggttccggc tatccttatg aactgtgaca atcagactgt catcaccaag 420

gtgaagagtt caaaggacaa catgaaatcc accaaacaca taagaatgag attaaaagct 480

gt 482

<210> 8824

<211> 444

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-C11

<400> 8824

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tgaacccagg gcaaagggac tggacaaggt accagccttg ggaacaaaag aaagaagagg 120
ccacctgata tgtatgaatg gtacctgata atcctcttct atgtttcgca tttgggttgg 180
tgtcgcggtat ctaaaaccgc cagtcacctt ggtttcatgg actggacctg aataatgtac 240
tctatctgat actgaatacc tgccactgaa caattttaat ctctgtggat gtggcaattg 300
agaaactggc gattcgggtcg tcggtgtttg cattgaagag tttctttttt ctactgatgt 360
caatggtgcg tggatgttga gatgctgaaa ggagataata ttgtttggta aattccgtgg 420
tgttgcaaca tgcccgtgtt cttt 444

<210> 8825

<211> 349

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-C12

<400> 8825

ggcgggtgggg tcaatcccgg aggcgcagct gaactaccgg gcgatactgg tgcaactctc 60
caagaagccg ttcaaggcaa accggacggt gacaaacgta gggccggcaa attcaatgta 120
cactgctcac ctggacgtgc ccaattggct caaggtgaag gtgcagccaa aggcgctgga 180
gttcacgtcg gcgatggaga agaagacatt cacggtgacc gtgagcagca agggaggtga 240
cgccgacgcc aacgccgggc agctggccga ggggagccta cgctgggtgt ctgaagatca 300
cgtggtgceg agcccgatca tcgccgacgc cagcgtttgt cccacatga 349

<210> 8826

<211> 414

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-054-Q1-E1-C3

<400> 8826

catccttact gatggcgacg aaacagagga actctcaatg aaagcaccaa tggtggtgtc 60

aaaaccggcg gatctcaagt acgggggtcnc gaactgtgcg tctaagccag atggtaacag 120
 gaggcaaggg acatgaagtt ttacccaggt tcgggccctc tcgatggagg taaaacccta 180
 cgtcctgctt gattaatatt gatgatatgg gtagtacaag agtagatcta ccatgagatc 240
 gangangcta aaccctagaa gctagcctat ggtatgattg ttgatgtgta tgttgctcta 300
 cggactaaaa ccctccggtt tatatagaca ccggataggg ttagggttac atagagttgg 360
 ttacaatggt aggagatctt catatccgta tcgccaaagt tgccttccac gcc 414

<210> 8827

<211> 470

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-C7

<400> 8827

tacggtcagg tactccgggt cgacgcggag tccttggttg atttatagaa ttctcattgc 60
 acttcaacta aatcttttga gtgtggcttt atagaatgct tcatgtgctt cacttatatc 120
 atttgaagtt ggattgcttg tttctcttta catagaaacc tgccatttgt agaatgctct 180
 tttgcttcac ttatatattgt taaagtgtgg gcatatcttt tgtagaaata attgaactct 240
 cttgcttcac ttatatcttt ttagagagat gacaggaatt ggtcattcac atggttagtc 300
 ataaaatcct acataaactt gtaaactcgt gaatatgata tgtttgattc cttgcaatag 360
 ttttgcgata taaaggaggt gatattagag tcatgctagt gggcggttgt ggattgtaga 420
 gacacttggt ttgaggtttg caagtcccgt agcatgcacg tatggtaacc 470

<210> 8828

<211> 369

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-054-Q1-E1-C8

<400> 8828

cggtcaggta tncggggtcg accgggatga cattgtaatc cagcaggact taagtccact 60
 ttggtcggta catctcaaag gcagggttaa tggtgccgtc aaaacctgtg gtgagatttt 120

caatatgttt gatacgtatc tcaacttctc aaaccctctt atcgccaaga aatttgaccg 180
acgtgcatgt ggggtgggcat atggcatgaa catgtttgat ttgtctgagt ggagaacgca 240
gaatattact gctgtgtatc actactggca agaacagaat gaacatagac tgttatggaa 300
gttangaaca ctccctgctg gcttggcgac attctggaac ancacttccc tctcgatcgc 360
tcatggcat 369

<210> 8829
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-D10

<400> 8829

tcggaatcc aaggtcgacc ggctgggtat ttgcagatat ttgaactatt tagtcgccat 60
aatattctct tgggctcgcc tggaacctgc gtagaccaag tacaattttg gtcttaagtt 120
gtagaagtga agatgttaaa tattttctaa tgttcttacc aaaggaatgt gtaaataaat 180
catatatata tatatagctt gttcgcacga tagagcggac gacttaggtg catagttgaa 240
aatgtgcgta aaattctata caagcataca catcttttac ggtttggtat cgtgttaa 300
catagcattc ctttttatga tgattgtgca tgtaccttgg gtatgtattc tgcaaccttg 360
acaaccggcc tccactcttc tgggggagga gctcgaacaa gaatcaagaa ggagccaaag 420
gagtttacac aagagttaaa gcatacaaa 449

<210> 8830
<211> 328
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-D11

<400> 8830

gtcggccggg gatcggcggc aaacaacagc ttcgaggccg aggtgaggac gcttggcaag 60
attcggcaca agaacatcgt caagctcctg tgctgctgca cgcacaatga ctccaagatg 120
ctggtgtacg agtacatgcc caacggcagc ctcggggacg tgctgcatag caggaaggcc 180
ggctgctgg attggccgac gcggtacaag attgcactgg acgcagccga ggggctgtcc 240

tacctgcacc aggactgcgt cccggcgatc gtccacaggg atgtcaagtc caacaacatc 300
ctcttgatg cagagttcag cgcttgcg 328

<210> 8831
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-D12

<400> 8831

tcggatatcc agggtcggcc ggtcctccac ggcgtagtcc atttgccgcg acctcgccgc 60
cgtcagatcc gaccctcta gtactagttt agcgtagtat gtagtataac tatgcttgta 120
gttttttgat catgtgatga actatgtagt atgtgatgaa ctatatttgc gcaatttctc 180
ccgcgaaagt gttttttcaa attatgcagg ttagatagc ggttctgttc ggccgcgcta 240
gttttcgacc cgcaaacgcg atcttcgtgg aaccgcaa atgcgttttgcg ggtcaaattt 300
ttgcagggtc tgctagagtt gctctaagca cacacatttt tgcttccttg atagatattc 360
tggtttttcg caaataccta tttcccaacc taatcaagaa aagaccactt tta 413

<210> 8832
<211> 184
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-D2

<400> 8832

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ccgttgccaa gccaaacgcaa ggtaaccaac ctaaaaggga aacaaacaaa ggatcctgaa 120
gggcctcaac caaggcaact tccttgccct gatccttgcg cccctggggt tcccaacgga 180
aaaa 184

<210> 8833
<211> 341
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-D3

<400> 8833

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tgtgaggatc ttcttttagt ctgtatgcac cccttgccca ctaatgacat gaccaggtta 120
ttctatctgt ggttgagcaa atgaacattt attcaacttc acatatagtt gattctgctt 180
cagaagggtca aatacttgct gcaaattgggt gacatgatct tgcaaggatt tgctgtagat 240
taagatgtca tcaacatacc ctogttgtaa cttcttctt catttaagcc acaattttgt 300
ccacagcatt ctggacggtt ggtggtgcac ttgtgagccc a 341

<210> 8834

<211> 482

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-D5

<400> 8834

acggtcaggc acgtccgggt cgaccggaat cccatgagca tgaggaaagg aaagctttgt 60
gctgcattgg tgttttaagt ctttgagcag tcaaattgagc taagctcctg tgaatgaaac 120
gcctgtcctg ctaagcccaa actctaattg gcttgacttg gaagtaggcc actctttcac 180
tgtgaggatc ttcttttagt ctgtagccac cccttgccca ctaatgacat gaccaggtta 240
ttctatctgt ggttgagcaa atgaacattt attcaacttc acatatagtt gattctgctt 300
cagaagggtca aatacttgct gcaaattgggt gacatgatct tgcaaggatt tgctgtagat 360
taagatgtca tcaacaaaaa caagtacaca aacctagtc agctcagcca gaattgtgtt 420
catagcactc tggaggggtg gtggtgcatt tgtgagccca aatatactaa aattcatagt 480
ga 482

<210> 8835

<211> 488

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-D7

<400> 8835

cggtcaggta taccgggtcg accagcacca tccaagacag tgttcatgcc gaccagtac 60

ataccgttaa ttagttgag actgacggg attggatcgc agtcaagggg tttgatgctc 120
gccaccctac gatcgttatg ctgctgaca tgccatttct gaagatcagg caagcatcag 180
caagcaagga gctggcttaa aaagcttcgg cctgagggct ttgagtaaac ggtacagccc 240
cgacaagcac gcggcgagcg gcatggtact gagattgtcc acacgtgaaa caatgagctt 300
gattacctct gtggggagcg aattccaacc actctttcgg ccacgctgc tcggttctgc 360
cattgttagt gcttgggttt cagacgaggg gggaggcgcc ttagcgggga tggaagattg 420
gacgagatta tgtgctaca aagatggaga agcgaatatg tgctgcagga agtggacaag 480
tgatgatg 488

<210> 8836
<211> 418
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-054-Q1-E1-D9
<400> 8836

ggtcgaccgg gcccgagcac aaatgacatt ctggacgcgc acattgcatg caaaagcgg 60
ggttaccgcg tgcaggggtg cacacagtgg cacacggccg gccaaacaat gtctgggggc 120
ttgtccttcc tggggaggtt gcatctgatg tggtagattg gttaaaagt acacggttaa 180
atggcagtta acacctgaag tttattgcag taaactttga ggagcactgg cgatccacag 240
gagagggatt ggaaacaatg gagttgtctg gtagatttag ggtagaagg actttcatcc 300
tggtaat tttt gagaagaatt ggaccactaa ttaatatagt tgctttacaa ctaagtaac 360
cgtccagaa tgaagatcat gatgatgctc tcaaatggag aagccacttg agctaaac 418

<210> 8837
<211> 478
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-054-Q1-E1-E1
<400> 8837

ggtcgacctc cgcgagcag gtgcaccgca tgatggcaga aatcgacacc gacggtaacg 60
gcttcatcga cttcagcgag ttcattctct tctgcaacgc caaccgggg ctcatgaagg 120

acgtcgccaa ggtcttctga atcagttcat ttcacctcag ccgtccgttc caggagccga 180
tccatctacg tacggcttcg tatatcaatt tcatgcaact acctactcgg gtcccgatcc 240
agcctcagct tcacctgagg cgggccctaa atttgtttga tcgattcttt tgctactagt 300
agtaactagt gatgatcact gttgcatcat ttatttattt attttatata tcatcacaag 360
tttctgtga ttcttttctt tctatacctt tttgtcgatc gtcggctcca gctcgatcga 420
acgatccatg ctgctaattg tttgtgtacg ggtgattaag taacttgtgc acttgtgc 478

<210> 8838
<211> 259
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-E10

<400> 8838

cttacccccg gtatgtagtt cgggcaagcc ctgaaccgga acgggcgttg gctgcaaaat 60
tttttgggcg caaaattaac aaaagggtgg ttttaattcct aagttcctta agttttccaa 120
ccttgaccga tgtttgggcc caaaatgtcc ggaattttta gcctttttgt gttacctttt 180
cctgccgtgg ttaaaatttt tttccctcta ggtaatgaca tgagcaattt ttaagaaaaa 240
tttataccca taccaattt 259

<210> 8839
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-E12

<400> 8839

gtcgaccggg caggatgagg aagggtggc ggccgaggcg aatgaagacg aggcggcgctc 60
gtccaacgag aaggacatca aggagatcaa cgtggaggat gacggatttg tcgccatcgc 120
ggatgcctcc gtgggcgtat tcaccaagga ggatgacatt atcatctcgg ccgatgctcc 180
ggcgatagag aaggacaaa tcgacacgtt cgtgcctgct ccggcagcca aggccaacga 240
ggatgccggt gccaccttcc tggctgcccc ggtggccggt gatgatggca gtgcctcctt 300
cgttgctgcg ccggcggcca aggaggacga acttgatatcc atctcgtctg ctccgttggc 360

gggggagatt gagggatatca ccatggcggc tgctccggtc gctga

405

<210> 8840

<211> 353

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-E2

<400> 8840

cccaattatc ccccaaacct tgattaaggt tccccaaat aaggcccaa aaatggtgcc 60
aaaatcccaa tcccgccaga atggctaagg ggttaatcct ggggccgga tgcaaaaagg 120
gaaaagccaa gaccaatggt tcttggaca atccaatgac caaaggaaca aagcctcaag 180
gtgtctaaaa aataattcca aaattggtta aatttgaagc ctaaaccaag gaatttaacg 240
ggcccaacct tggggaaaat tttgaagaaa atgtaaaagg caattcccca accttcgaat 300
ctcaatccac aaaaccttga caatgaaaac ccaaccaggt ttccaaaaaa caa 353

<210> 8841

<211> 487

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-E4

<400> 8841

gtcggaaaatc agggtcgacc gggatcagcg cctcaacgtc ggaggagaac atgcgctact 60
tcaatgtcat ggcccttggc cccgcgcagt cgccctacga atgtggagtc gtcaagcttg 120
aacttttctt acccgaggaa tatccgatgg ctgctcctaa agttagggtt ctcacaaaaa 180
tataccatcc catcaatgac aagcttggtta caatatgcct cgacatccta aaggacaagt 240
ggagtccagc tcttcagata cgcactgttc ttcttagcat tcaggcactg ctgagcgccc 300
caaaccaga tgattccctc tcagaaaacg tcgcaaaaca ctggaaatcc aatgaagctg 360
aaactgttga gacagcgaag gaatggactc gtatctatgc cagtggcgca tgacaagcta 420
acgctgtcat ggatgtaata acaccgtgtc atagttgggc ctaatctaaa accatttcct 480
tgataaa 487

<210> 8842

<211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-054-Q1-E1-E5
 <400> 8842

cggtcaggaa taccgggtcg accgggagtt cattacaata cccaagtggg gatttatttt 60
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 tgggtaaaga ttcgatggac tatggaataa ggagtggcga gagcctaagc ttggggatgc 180
 ccaaggaacc ccaaggtaat attcaaggat gaccaagagc ctaagcttgg ggatgccccg 240
 gatggcatcc cctctttcgt cttcgttcat cggtaaacttt acttggagct atatttttat 300
 tcaccacatg atatgtgttt tgcttgagc gtcattttat tttgttttgt tttgcttgct 360
 gtttgaataa agtatcaaga tctgaaatta ttaaatggga gagtcttcac atagttgcat 420
 aattattcga ctactcatcg atcttca 447

<210> 8843
 <211> 321
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-054-Q1-E1-E6
 <400> 8843

gggtcgaccg ggtatgtcgt gaaaactaca tatttctgct gaagaaacta cataatagtt 60
 ttactgatcg aggaggaaat tacttggtt caatattggg aatggtaggg agagaaagaa 120
 tatgccattc tctctagctg gaaaggacac tataccatac tggatgttat aaaaaaattt 180
 ggtcatgccc ccggaaacat tgaccacctc aacgttgact ctatttccgt tacaatcaat 240
 caataactgg tataatacca tgaccctgg cctgcttctt ggcatatttg tggttgttca 300
 aacctcaaca ataaaggttt g 321

<210> 8844
 <211> 483
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-054-Q1-E1-E7

<400> 8844

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tggcgatatc ttccatgcta cacacattat aggcgggtcc caaacagaat ggtaaagttt 120
atactcccc tccaccaaca agcatcaatc catggcttac tcgaaacaac gagtgcctcc 180
aacaagcaac agtcccaggg ggagttttgt ttgcaattat tttgatttag tttgcataaa 240
gcatgggact gcgcatcccg gtgaccagtc attttctcat gagtgaggag tggagtccac 300
tcctcttgag aataacccgc ctaacatgga agataagggc agccctagtt gatacatgag 360
ctattcgagc atacaaaaca gaatgtttat ttgaaggttt agagtttggc acatgcaaat 420
tttacttgga acggcaggta gataccgcat ataggaaggt atagtggact catatggaat 480
aac 483

<210> 8845

<211> 480

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-054-Q1-E1-E8

<400> 8845

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gtcgtctgcc ccactctgaa gtctcaactg gccaacgaga agcagttgat tgatcactat 120
ggatcaaagc atcccaagga gaaacctcca ggtcgatcaa atgcagagtg actgatgcga 180
ggcggaagca tgagctatac tttgactggt tctgagggtt tttcaatctg ctccacactc 240
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agaaccttga agaacacaga cttgccttaa atgaataacc tggccaactg gccacaaacc 360
ttcaaactgg aagtgttaca atccttgat aagagaatgc taaactttcc caataaggca 420
atctcctggg gcggtgaattg cgggtctaaaa agctcaaaaa tgaatgtggt tttcgcttac 480

<210> 8846

<211> 464

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-F10

<400> 8846

gccgtgagta atagtgcaga gaattcacca gaaaaataat tcaattaaat tcttaccaga 60
attagaatgc cccaagaat ttttaagttaa caaaatgggg aaaaaaaaaac attacaaccg 120
tccggtgtac ggtcacaaag cacaacagcc aaagtctgct cacttgcgta ctgacatgac 180
atgttggatc catccaacca agtgatatgg cgttatctac cgtgctggct agctagtgc 240
ccactgaccg ctgaagtact gaacccatat acaccacgat agtattctgg tcccatatgc 300
tcttgagtc cctacgtcgc gtggcttcta gtatttcacg atgcatgata aatacttcct 360
ccatcctaaa attattgtct tagatttatc tagatacaga tgtacctaat actaaaatgt 420
aatttgatac atccgtatct aaacaaatct aagacagaaa tttt 464

<210> 8847

<211> 179

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-F12

<400> 8847

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aacaaggtcc ccaacttcat tggcaattgc ccggaatggc aacaccatgg taattgaacc 120
cttctggcaa aacaaccggt tacccaatcc aatggccgga ccctccggct tttcataaa 179

<210> 8848

<211> 482

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-054-Q1-E1-F5

<400> 8848

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tctcagtcaa acaatgaggc aaatgttagt gcgcgcacac atcaatttcc taactaaaat 120
cagaaggctg tgagccattt gatttatctt aattgcatgc tttttccagg gaaatctgga 180
aagcacacag gaagtgcagg tgaaccaaac gagcttatct caatacaggg acatccagag 240

aaagattggt gagtttatca gaaagagata ccatattctg gaaaaatgct tggacattga 300
 atatgccgtg ataaaaacaa atactcctgt tcctgatgat cttactgaac aaaatgttcc 360
 tatgggacat agcccagctg ttccagatat cagtgaagtg ttgagagaac ttccccctct 420
 tgtaccaatt tctgccaaag aagtggcttc tgatggctca actgaccang cacaccttcc 480
 cc 482

<210> 8849
 <211> 366
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-F6

<400> 8849

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 tgtgattata accggtcata atggcactat aaatgggcaa ggccaaagt ggtggatcaa 180
 atttcgcaag aaactcctca atcacaccag gggtcctctt gttcagctca tgcgggtcaag 240
 taacattact atttctaaca tcacattacg tgattctccc ttctggacac ttcatttata 300
 tgactgcaag gatgtcaaag tctcggaac tactattctg gtcctaattg ctggggctcc 360
 aaacac 366

<210> 8850
 <211> 429
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-F7

<400> 8850

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 tttattgcta aagttaaaat ggaaatagtc gtgtgcaagg agcagggtga gccagtaatt 120
 gacaaaataa ttgagaaggc cagaactgga gaaattggtg atgggaagat attcttgata 180
 cccgtcgcgg atgttgtaag ggtacgcacc ggcgaacgcg gagtgcattg ggagaggatg 240
 atcggcggtc tgtcagacaa actgcctccg gtgatcacia tctcatgagt agagcttgac 300

tgctcttgcg gctgtgaact gtaagcgcat ccctcaggct ggttgcttgt ggccgtgtgt 360
gtcttgacct ttggggaata atgtgtatgt aactttgcgt gttggcacga ataaattggc 420
accagcatc 429

<210> 8851
<211> 289
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-F8

<400> 8851

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aaatctatct tagggaaagc ccgatgtgtt gacatatatc atagagctca ctatcttctgt 120
gtgttttccc catcattcag ttgcctcgtg gtgactgacg acgtagctgc ataaatatct 180
aaaagccgag gtagcagtgg gtctctctca ctgatcaaat ttgaggcgtt gagcatggaa 240
acatctgtgt tatgttcttc cttgggttaa ttaacctggt tttcctccg 289

<210> 8852
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-F9

<400> 8852

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atcttctgcg tcgcctgcgg agccatcctc ggctggaaat acgtgtctgc atttgacaag 120
gatcagaggt ataaggaggg caagttcatc ctggagaggt gcaagatcca ttcgggcgga 180
ggcggccctc ccgaccgcat ccagctgtgg gctgagcatg acgctcgcat aagttccagc 240
gaggatgacg accagggcgc cgtgtgacct tgcaagacaa tgcaagatca gttcattagg 300
caggcagaca tgacatgact gtaaataatta gtgttaatca gcgtcgttcc gttccctggc 360
actgcaaadc atgtagctgc tcgctagatg aagaacctg aatgcttaac tatctatgca 420
tatgc 425

<210> 8853

<211> 396
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB104-054-Q1-E1-G1

 <400> 8853

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 acggctgcac acacttaaac tcgattgggt ggaagagatt cctcgatggc aagaatcttc 120
 gtgttgga ggtcatccta attactatca ggaacaccca ccgcccaggc ttgaggatga 180
 tgatcgtatt tgatcatc tagaactata tatgtgtgtg tggctatc atctagaact 240
 acatatgatg atcgtcgtcg atatcatcta gaactacata tgatgatcgc cgtcgatatg 300
 acctgtact gcttgaggat gcatgttgac tatacatgaa attgttatct agtactccct 360
 tcgttccaaa ttaatcgtcg tgggttggaac taaaac 396

<210> 8854
 <211> 423
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB104-054-Q1-E1-G10

 <400> 8854

ttatagaaaa aatagatctc tcaggcttaa cttaaataat ttcaagagcc taaaaacaag 60
 ggaaattggc ttaaaaccca agaaggctgg gaatacaaga ttaaaaataa aactttctaa 120
 tgagtgtgtt gaatactatg ataagtttga tacttgataa ttgttttgag atataaagat 180
 ggtgatatta aagtcatgct agttgagtag ttgtgaattt gagaaatact tgtgttgaag 240
 cttgtgattc ccgtagcatg cacgtatggt gaaccattat gtgatgaagt cggagcatga 300
 tttatttatt gattgtcttc cttatgagtg gcggtcgggg acgagcgatg gtcctttcct 360
 aacaatctat cccctagga gcatgcgcgt aatactttgc tttgataacc tggaaaattt 420
 tgc 423

<210> 8855
 <211> 385
 <212> DNA
 <213> *Triticum aestivum*

<223> Clone ID: LIB104-054-Q1-E1-G12

<400> 8855

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tgattacggt tgaggtcaca taggttatac aagaatatat cacatggtgt atgctctttg 120
cggatgattt ggtgctactt gacgatagtc ggacggggta aataggaagt tagagttatg 180
gagacaaacc ttggagtcga aagggttttag gcttagtaga actaaaaccg agtacatgat 240
gtgcgggtttt agtactacta cgtgtgagga ggaggttatc cttgatggcc aagtgggtacc 300
tcagaaggac acctttcggg atttgaggtc aatgctgcac gaggatgggg gtattgatga 360
agatgtgaac catcaaatca aatcc 385

<210> 8856

<211> 285

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-054-Q1-E1-G2

<400> 8856

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gcggcctaaa taacctgaca tattgccagg aatattgggt aaattaggaa atggaagtga 120
tttcagcgac aacaacatgg aattttggta atgatggtgg acaattcctg ggcaatggaa 180
aacgcgacgc agggtcangg gcttgtgccc ttcggtggga aaacgagtaa catgttggtc 240
gggctggagt tcgtgatggc caatggttct ctacaatggg gactg 285

<210> 8857

<211> 289

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-G3

<400> 8857

gtcggccggg caaaaaaata gtatcaatgt gttcatggc caagtgacgg ttggcatact 60
cgtaatgcaa gaatgtgccg gtggctctcc ggttggaaact cctccaaatt tgaaccgggc 120
ctccgggtcc tcctcaaggg agttgcgtcc aatgacaaaa atcccctggt gctattaaat 180

atccgttcct ggggaaatct ctctatccct ctcccgttac attgtgtgcc cttgggtttc 240
ttaaagctga tgataaagtc tttctcctc agacaaaatg aactgtacc 289

<210> 8858
<211> 489
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-054-Q1-E1-G5

<400> 8858

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aagaagggat aatgactatg gtgaggcgtg tatttatagg gacagggatg gtacagcggt 120
attacacagg tgcccctggt gattcacatc tgaaggacac ctggccatca tgcaacatat 180
aggaggttgt tccacgttcc cacgcacgcc tggattgtcg ggtggtcggt cccacttctt 240
cgggtttcag gtgaaggaat tagcattgaa agcggactta atgtttgtct ctgtatcttc 300
tgctgacaag gacgcagaga agacattcaa cagtttcaag agaatgcata tgatttggag 360
agatagagtt tgagatagaa agcatagaga ggttanggtc cgatcacatt cacttagttc 420
anaagattca acangaagac atagctataa gtgaatgctg taaaggacag aacactagta 480
tatatatat 489

<210> 8859
<211> 452
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-G6

<400> 8859

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ttcatcacc aggaggcgag gcagatcatc atctcgcccc caacagccaa ggagctagtg 120
atgaagctgg aggagtacgt ccccgagtat gaggtcggcc tgggtctggga tgaccagaac 180
cagatgccaa gcaacagcct ggtcccagag ccgctggaga caccgcgat cacttcatcc 240
taatcgatgt gcctcgcta catctcagtt agggttctaa caacagtgtc gagatagcgg 300

cgccacatat atttattctc tcctagataa gtccctagcca actgaagggc gacgaggggg 360
cacattatag catgtgtgct tgttttggtg gcgtcgatcg accgatctct tgtgtcaccg 420
ctgatgattg ttttgggtgg catgattata tt 452

<210> 8860
<211> 474
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-054-Q1-E1-G7
<400> 8860

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ggtgggtttta.ttttatagaa attattgata tctcatgctt cacttatatc attttgagag 120
tcttttagaa catcatggtg atttgctttg gctataaaat tagcccta atgataggca 180
tccaagatgg gtataataaa aaatttcata taaagtgc attaatactat gagaagtttg 240
atacttgatg attgttttga gatatgaaga tggtaaatatt agagtcatgc tagttgagta 300
gttgtgaatt tgagagatac ttgtgttaaa atttgtgatt cccgtagcat gcacgtatgg 360
cgaaccgtta tgttattaag ttggagcatg aattaattaa tgattggctt ccttatgagt 420
ggctgtccgg gaacagcgat ggtatttcta ccaatctatc ctccctaggag catg 474

<210> 8861
<211> 281
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-054-Q1-E1-G8
<400> 8861

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tgtaccacca gtgccatcct ccttggcgga caccttctta gtcccaggtg gagctgccat 120
tgccttctta cacttgccgg tggagctcga tgggtgcgtcc tcgacggtag cgcaacactc 180
caaagaggtg cacttgccgg agtaggcata agagctcttg ccggacttgg tcttcttcgt 240
ccctccggga gcttcaacgg caagtgtctt gcgctctgct g 281

<210> 8862

<211> 333
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-054-Q1-E1-G9

 <400> 8862

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 catcgcgacc aagtgatctg gccgctgagc agcgacgcca tggacgcgat gattcgggag 120
 cagagcagct tctgttaaga aataaataaa gaggatcggt gctcgacaat gttgtggccg 180
 tgtgttgggt gtgattgttt gtttgttgca gtggctgcat tcaactggctg ggcaccagga 240
 tctataagat aatgtgtacg tacgtacgta ctgtattcct gaacttgtagc tgtgacgagc 300
 gagactcgct ttgtaacgtg ctattctgtt gct 333

<210> 8863
 <211> 384
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-054-Q1-E1-H1

 <400> 8863

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 actggtatgt ggtatgggta ttgtaagttt tttcatataa agtgccttga atactatgca 180
 aactttgaga cttgatgatt gttttgagat atgaagatgg taatattaga gtcattgctaa 240
 ttgtctaatt gtgaatttga tagatacttg tgtcaaagtt tgtgattccc gtagcatgca 300
 cgtatggcga accgttatgt gatgaagttg gagcatgatt tatttattga ttgtcctcct 360
 tatgagtggc tgtcggggac cacc 384

<210> 8864
 <211> 249
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-054-Q1-E1-H10

 <400> 8864

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aaccggaggc ataggtaggt cgataatcat gccttacgat cgcacttgtc caaaacttac 120
ggtttgtcac aaaagtaccc ccaccaatth gaactaccgg gcctttcggc tcaggtttat 180
accggggatt tcccctgttg ggattttgac acctgccgga cttttcgcgc gcgttgtaat 240
ttctggata 249

<210> 8865
<211> 370
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-054-Q1-E1-H11

<400> 8865

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ggggcatgct aaaaagtgcg cagattgtgc ttggagttac caaagctggc gccgctgcta 120
tatctggata gcaatgaagt gggtgcaaca gangagaagg agattcttga gctttggagg 180
gtgctgaagg atgagctgtg tcttccgctg atgatatctt tgtgccaaact caacggggtg 240
cgcttgccgc cgtgcttgat ggcattgcca ggtgatctga aggctaaagt cttggagttt 300
gttcctggtg ttgatcttgc aaaggttcag tgccgatgca aggaattgca cgatcttgca 360
acagatgata 370

<210> 8866
<211> 394
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-054-Q1-E1-H12

<400> 8866

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ggcgggaagg aaaatccgcc tcccctaaga agcaacccca tgcccaccga aaggaccggg 120
gatggggtta ctaacaacct tcagctatgc ttacaaaaca aactttgggg gctcccaagg 180
ccagttcacc aagctaacaa ccggcggcaa cttgaaccaa aatgccccat tacccaatgg 240

gaaactaaac atggcaaagg aaacacctcc attaaaatta taaaaaccaa agatgacacc 300
acctaaataa atttgggttt ttatgccacc ctaagggatt taaaaaacg cttgttgga 360
gccaacccca ttttattttt gtcctttgct tttt 394

<210> 8867
<211> 245
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-H2

<400> 8867

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ctcgagtgga acggcgactt cgccctcgag accctcttct acgccgaggt ggagaacacc 180
gggcccggcg ccgacatgag ccagcgcgcc aagtggggcg gcatcaagac tgtcacctac 240
gccga 245

<210> 8868
<211> 77
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-H4

<400> 8868

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cgaggaagtc cttaaaa 77

<210> 8869
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-054-Q1-E1-H6

<400> 8869

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ggtgtcgagc ttccacagcc ggaggcagag ttccacaccg actccgacga ccaactccggc 180
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 gaccactccg gcgacgactc cgacgacgac ggacagctgg ttagtcatct ataccattt 300
 atgtgtcaaa tagatcatag ggtttctctg gttaatcctg cctccccctt tttggaatag 360
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<210> 8870
 <211> 396
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB104-054-Q1-E1-H8

<400> 8870

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 accaagcata agtcatgcac gcaaacctgg atcacggcgg gcttcttctt ctcttcgtcc 180
 tttagatcct tctctcgtcc caggactgtg gtgtactcaa catctagccc agcgacncgc 240
 tcatcatctg agtcttcgaa catgcttctg aagcgagaaa ggcatccttt cacaatcccg 300
 gaagaacggg tgtagatgac gtcgaactca tcgccggtga tggttctaac cttgtactca 360
 ccacggatcg tggagatttg ggacgccatg gatttg 396

<210> 8871
 <211> 469
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB104-054-Q1-E1-H9

<400> 8871

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 ggaacgcact tgtccaaaac gtaggggtgtg ttacaaaagt acccccacca atttgaacta 180
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gggagttttc gcgcgcgttg taatttcggg atagcaaggc gcgggttggtg aaggcgccag 300
 ttttgggagc acgatatttg aattttcggg atataacaag acgcgggttg aatttttaggg 360
 acaagcctaa cgtgtagcaa tattgtactt gtacgtacca aatcaattcg cacttccttc 420
 aaccaaaaag aaaacgacaa aaataaaaact attcacacca cacanagag 469

<210> 8872
 <211> 462
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-055-Q1-E1-A10
 <400> 8872

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 gcaacttggg ggttagaacc ctttgaatc tagcctgctt cttggcgctc atggacactt 360
 cttctgtggc ataacgggcg aggttctcga actctctgct gtaagcatca acagccatct 420
 tattctgggt gagactacag aactcttctc tcttgcgatc ga 462

<210> 8873
 <211> 465
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-055-Q1-E1-A11
 <400> 8873

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 gacgccagca aagcaaagga agatccgcaa caaaactctg caaggttaat tctactgatct 180
 gtacttcaaa cttgattggt gaattgtact aaattccata cccggtcttc cgggtggcctc 240
 cctgcaaaaa aattgagata tctcatatat tggcaaagct aatgcctgag agggagctac 300

caaacaagca tgctttatat ttgggacgtg caggctggaa ggatcattgg taattgatcc 360
 tatcaaagga aggtgcgac tccagcctga aggaatggct ggttgattca gctataggaa 420
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<210> 8874
 <211> 482
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-055-Q1-E1-A12
 <400> 8874

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 cgaggcaggg gggcgcgccc aggggggcaa gcgcgcccc accctcatgg acagggtggag 180
 gccccctag cgtggattct tcttcagta tttttaatat tttcaaaaa taagttccgt 240
 ggagtttcag gtcattccga taacttttgt ttctgcacat aaataacacc atggcaattc 300
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 acaagggcaa aagtgtttgg aaaagtagat acgacggaga cctatcaact cccccaagct 420
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 tt 482

<210> 8875
 <211> 395
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-055-Q1-E1-A4
 <400> 8875

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 ttggatggca gtcattgtaat agggtaggca attagtttac ctatttatct ttagccagcc 180
 gggtgtggcg tcttatcttg gctagtctgt gtgtccagcc tctttaactc tgtgtgagct 240
 gtctttttac tacttttcgg tcggagactt tggaaccttg ttggaacttt ttatttcggt 300

aataagatgg ccgtatgcat cactctgatg cagtggccgg ggagatcccc ttttcgaaaa 360
 aaaaaaaaaa aaaaaaaaaa aaaagcggcc gctct 395

<210> 8876
 <211> 405
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-055-Q1-E1-A5
 <400> 8876

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 gcgctactcc tattcctttt tcttttttcc cctttttcat ttatttttct ttacatttta 240
 ttttttttcc tttcaccttt ttctattttct ttcattttca tttactttcc atttaatttt 300
 atttccttta gcagtagcgc ctttcatcgt aaacgcgctg ctacaaagca ggtagtggtg 360
 gcgcggttct acgtacatcg ctactactat gcgtagccta tcggc 405

<210> 8877
 <211> 405
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-055-Q1-E1-B1
 <400> 8877

ggatcttaat gtaggagaat tcccagatct taaacttctt gttgactggg cagtcaattc 60
 gggttttcat cttgttcagc tccttcctat caatgatact tctgttaaca agatgtggtg 120
 ggattcatat ccatatagct cactctccgt atttgcggtg cacccttgt acctgagagt 180
 gcaggcgctt tcagatgcta ttccagcaga tgtaaggaa gagatttcga aggcaaagaa 240
 ggagttggac aaaaaggacg tcgactatga ggcagcggtg gccacgaaac tcagaattgc 300
 ccaaaaaata ttttaatttag aaaaggacaa agtgctaaat tcagctccgt,tcaagcagtt 360
 cttatctgaa aatgaggaat ggttgaagcc atatgctgca ttttg 405

<210> 8878

<211> 458
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-B11

<400> 8878

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 tctatggtca catcatcccc ttccccttca aaagaaaccg tcctcggttt cgaggcagtc 120
 tttgcaacct tcttcttcaa tgtgacatgt ccatcccctt gattgcgttc tcaaacatcg 180
 gccgcagcac gcgtcgcttc ctagaatccc agaatagaata tgtattcgtc cgaccttcat 240
 gtgtagcatt gtgatcatat tgccatggtc tccccataa caagtacat gcattccatag 300
 gtatgacatc acatatacacc atatcagtat aatcaccaac ataaaatttg acgcgcacct 360
 tatgagtaac ctttaacttc cctgtatgat acatccactc gacatggtgg ggggttgcggg 420
 tgcttccata caggcaaccc caaagcttca acaaaccc 458

<210> 8879
 <211> 479
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-B12

<400> 8879

cggtcaggaa ggccgggtcg gccggtctca gaaggtaaac gatccagaaa tcataccaag 60
 gttagagaat gatttggtga aatgtcttgt cagtttcgag ttggtgttcc caccatcctt 120
 cttcaacatc atgacgcacg tcctagtcca cctatgcgaa gagattaacg ttttgggtcc 180
 tgtatttcta cacaatatgt tccccttga gaggttcatg ggagtcttaa ataaatatgt 240
 tcataaccgt gctaggccag aaggaagcat ctccaagggc catgaaaatg aggaggtcat 300
 tgagttttgt attgacttta ttctgacct taagccgatt ggtgttcttg aattgcggca 360
 taagggcaga ctagatggaa aaggcacgct aggaggggaa caaataatat gtatggatgg 420
 acattctctc actgaagaac actacacagt tctacaaaat tccgccttgg tggctccgt 479

<210> 8880
 <211> 440
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-B2

<400> 8880

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ccgggccgac cgggtgcgcta acagagagac aacctggaag ttttagagag tcatttattt   60
ctgttgagtg cttttataaa gtttaaaaac aaaaaataaa taaagagggg aacccaaaaa  120
tttttcaaaa aggaaagtga aagtgaaaga gacaagcatg gttgaagtgg gggagctcct  180
tgaactttgt tcatgctcac ggaaactttg tgaatcttga ttacagaaac ttttcaataa  240
aaataattat ccccttgtag aattccattg tattataaaa ataatgtgcc aaggtttgcc  300
tttaggatgt ttacaatgct tggttggttg tatggtgcag gacagaaact ttgactgtag  360
cgcggtggtt ttaatttttt tactggaacg tcaaacggtt ctgattcctt ttgcactgtc  420
cttccaaaca aatgttttaa                                     440
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<210> 8881

<211> 422

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-B3

<400> 8881

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ggcatatttt catcaggagag tctgcttcc accagtctgg ggattccaag aggaaagtga  120
acccgacgca ctaccgggag ccaaggtttt acaccaaggt gtttaaggaa tgccactcct  180
atgaccaaga tgggaattcc tttgagcttt ctctggtaac ttccaagtgc attggagctt  240
atgtgaagag caagaagaac cagaaccaga tatgttggct atgggagaag gtcaagtgca  300
cagaagacaa aggctttcag agattcctgg acaatgtgca gtacaaatcc actggaatcc  360
tgcgttatga gcgctggtt ggggaggggt atgtcagcac cgggtggattc gagaccacaa  420
aa                                                         422
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<210> 8882

<211> 383

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-B4

<400> 8882

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaattaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaagggg cccccaaaaa ggttcaaacc taacttacc ttgaatgcaa cttcaaacc 180
ctccaaaatt gccaccaaatt ttcaattcac gggccttctt ttaaaaactt cttaacggga 240
aaaaccctgg cttaaccaa ttaaaccccc ttgaaaaaaa ccccttttc ccaaccgggc 300
ttaaacccaa aaaggcccca accattcccc cttccaaaaa tttccaacc ctaaattggca 360
aatggaaccc cccctttacc ggc 383

<210> 8883

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-C1

<400> 8883

ggtcaagaaa cccggggccga ccgggagtta cagaatgggc cggaggtaaa gatttatata 60
tggaagtcc tattttggcc accaaaaaat gttcgggtatt gtaccgggaa ggttctggag 120
tggggcccac ttgcttgggg ggcccacatg aacgtgggta gtgggggcaa ggccccacac 180
ccctggtcaa ggcgcaccaa gatccccct tagaaggaat aagatcatat cccgtaggga 240
taggatcaag atccctaaaa aggggggata acaatcagtg gggaaggaaa cgatgggatt 300
tcttttctcc cacctttgcc aacgcccaat ggacttggag ggcaagaaac tagccctcc 360
accctatat atagtgggga ggcgcattgg agcttcaccc ttccctggc gcagccctct 420
ccctctc 428

<210> 8884

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-C10

<400> 8884

cgggtcgacc ggatgctagc tatcatagca tcatgcaaag caatatgaca atgaatgctc 60
 aagtcattga tatgattatg atggaagttg catggcaata tatctcggaa tggctatgga 120
 aatgccatga taggtaggta tgggtggctgt tttgatgaag atataaggag gcttatgtgt 180
 gatagagtgt atcgtatcac ggggtttgga tgcaccggcg gagtttgac aaactctcga 240
 ggtgagagag ggcaatgcac ggtaccgaag aggctagcaa tggtggaagg gtgagagtgc 300
 gtataatcca tgtactcaac attagtcata aagaactcac atacttattg caaaagtcta 360
 ttagctattg aaacaaagta ctacgcgcac ggctcctggg ggatagattg ggaagaaaag 420
 acaacgctcc gtccccaacg cca 443

<210> 8885
 <211> 392
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-055-Q1-E1-C11
 <400> 8885

atgctagcaa tcatacgatc atgcaaagca atatgacaat gaatgctcaa gtcattgata 60
 tgattatgat ggaagttgca tggcaatata tctcgggaatg gctatggaaa tgccatgata 120
 ggtaagtacg gtggctgttt tgatgaatat ataaggaggc ttatgtgtga tatagtgtat 180
 cgtatcacgg ggtttggatg caccggagga gtttgcacaa aactcagagg tgagagaggg 240
 caatgcacgg taccgaacac gctagcaatg gtggaagggg gagagtgcgt ataatccatg 300
 tactcaacat tagtcataaa gaactcacat acttattgca aaagtctata atctattgaa 360
 aaaaactact actcacatgc tctgcgggg at 392

<210> 8886
 <211> 372
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-055-Q1-E1-C12
 <400> 8886

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 ttgggtggca gtgttggtgca cttcatgccg tatgttggtc ttctctgtcc ctgtttgctt 120

gccgttgcac ctgtgatgtt cgggtggttag cagagtacaa aaattgtcag attgggttcgg 180
 gtgcactgac ggctcgggtgc cacatagtct gtgaggaggt ggtatcgata catcataata 240
 atgaacgaag attttttcta ctgcaagttg caggggtatg tcttcctttg ttttgttatg 300
 aaagcaaagc atgtagacc atacgatgtc tgttaaaaga aaagaccatg cgatgcaaatt 360
 tttattagtc ct 372

<210> 8887
 <211> 378
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-055-Q1-E1-C3
 <400> 8887

ggagagtcac ttagaatagc atggtatttg atatggttac aaatttggtc ctagaatgat 60
 gagcattcac gttgggtata ataaaaacta tcataggaag tgaattggat gctatgatca 120
 atttgttgct tgataattgt tttgaaatac gaaggtagta atgttagggt catgctagtg 180
 gataattatg aaattgagaa atacttttct tgaagttggc aagtcgtgta gcatgcacgt 240
 atggtaaaag ttgtgtgaca aatttgttgc atgaggtgct cttttgattg tcttccttac 300
 gattggcagc cggggacgag cgatggtctt ttcctaccaa catatacctc ttggggcatg 360
 tgtagtacta ctttgctt 378

<210> 8888
 <211> 417
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-055-Q1-E1-C4
 <400> 8888

ccgggtcgac ggggtcggct acatgagcgg cggctgcaag agtgatgatg gaagtttgag 60
 ttgtggatat tcaagtttta gaggaaaaag ggcaaccatg gaagacttct ttgacataaa 120
 atcatctaaa attgatgata aacaaataaa tctcttttga atatttgatg gtcatggggg 180
 ttcacgtgct gctgagtatt tgaaggagca cttgtttgag aacctcatga aacaccaca 240
 attcatgtca gatacaaaat tagcaataag tgaacatat aaaaaaactg attcagattt 300

cttggattct gaaatcaaca ctcacagaga tgatgggtca actgcatcga cagcagttct 360
gcttggaat catctttacg tggctaacgt aggtgactct cgggctgtaa tatcaaa 417

<210> 8889
<211> 118
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-C6

<400> 8889

tgaagttcat acaaaactca ctttggaaaa ttttgggtcat gccagttcac atgttccaat 60
tattttaacg attcgtgttc aaaactcatc gcacaccaca atttagcttt aaacacac 118

<210> 8890
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-D10

<400> 8890

acgggtcagga ataccgggtc ggccggacct aagttagcaa aaaacgatcc atttcaccta 60
aattagctct taaatgatcc atttcaccta agttaggtca taaacgacct atttcaacta 120
agttagctca taaaagctca taaatgatcc atttcaccta agttagctaa aaaacaatcc 180
atttcaccta agttagctca caaacaatcc atttcacata agttagctca taaacgacct 240
gtttcaacta agttagctca taaatgatcc atttcaacta agttagctca caaacaacct 300
atttcaactt tgttagctca tatatgatcc atttcaccta agttagctca taaatgacat 360
atacttcttg ttctagtctt cttcttggtc tagtcaccta tttctaactt tcttatttac 420
cattttgcag atttcaattc acttcatgga agc 453

<210> 8891
<211> 480
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-D12

<400> 8891

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 tagctgacca cgcggagtgg agagacgcct acacgggtgtt cgggtccgtg gtgccggagg 180
 acatggccat cgccgaggag atgtcgatgc tccccgccag cacagacgtc tggagcgggtg 240
 tgaccgtcag gctgctgaag gacccgggtgt atatcaaggt gaagagaaga agcaatgcga 300
 ctgcctattg agctcgccag cgattttgtt cttcttcttc ttcttctttc acatgatgta 360
 gcagtagtgc caaaagataa gaacacaaaa ttacatgtcc aaacaaagaa agaaagaaaa 420
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<210> 8892
 <211> 400
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB104-055-Q1-E1-D3

 <400> 8892

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 ggttcccga cgccatgccg ctggacaagg gcgcgcccct gctgtgcgcc ggcatcaccg 120
 tgtacacccc catgaagtac cacgggctga acgctcccgg gatgcacctc ggcgtgctgg 180
 gcctgggcgg gctcggtcac gtcgccgtca agttcggcaa ggccttcggg atgaaggatga 240
 cggatgatcag ctcatcgccg gggaagaagc aggaggccct cgagaggcta ggcgccgacg 300
 gcttcgttgt cagcaagaac gccgacgaga tgaaggctgc gatgagcacc atggatggca 360
 tcataaacac ggtgtctgca aacatcccca tggcccctct 400

<210> 8893
 <211> 356
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-055-Q1-E1-D4

 <400> 8893

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 ggaggccagg gacttcaacg agggcatgat tcgggtgtgc agcagcggca agggcacgcc 120

gctgatgccc aacaggacgt tcgagaccta cctcttctcc ctcttcgacg agaaccagaa 180
 accagggccg atcgccgaaa ggcacttttg cctcttcaac ccagacttca cggccgtcta 240
 cgacctcgga ctctccggg acggcgcgtc cgtggctcca accccttcgc cgaacccatc 300
 gcccaatccg agccctaagc ccgcgccgtc gggaggccgg aagtgggtgcg tcgcca 356

<210> 8894
 <211> 384
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-055-Q1-E1-D7
 <400> 8894

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 gagccatcaa acgacagaat agatgccgag aaaccatcag aggagaaaga agacgacact 180
 gtgaagtcac cagaggatag catggctctt gagaagccag ccactgacaa accatcaaag 240
 gaagaggaag aaggcgagc caccgagaag ccgtcgcatg acgatgctgc catcgaggca 300
 ccatcgacac acgacacgga ctcgccacc gacataacct cgctgccac agagacgaac 360
 atatcagcct gagtcaaca agac 384

<210> 8895
 <211> 472
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB104-055-Q1-E1-E11
 <400> 8895

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 catggcaata atatctcgga atggctatgg aaatgccata attaggtagg tatggtggct 180
 gttttgacga agatataagg aggtttatgt gtgaaagacc gtatcgtatc acggggtttg 240
 tatgcaccgg tgaaagtttg caccaactct caagggtgata aagggaatg ctcggtactg 300

aagaggctag caatgatgga aagataaaag tgcctataat ccatggactc aacgttagtc 360
 aaaagaacta atatacttat tgcaaaaatc tacaagtcac caaaaaccaa gcactacgcg 420
 gaagctccta gagggataga ttggtangaa aagaccatcg ctcatccccg ac 472

<210> 8896
 <211> 413
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-055-Q1-E1-E12
 <400> 8896

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 ggtagttca tcatatccga accaatctga gcctttgcat aatcttttta gggttttgct 120
 ttgttgaatt tgcggttgca tcgtcgtgac tagttgctgg tcttagagtc tagtctttta 180
 gagtttcgag ttctgggtcat aagttgtcac gccgcgcgcg cactatcatc atcgcccctg 240
 ccatctacca ccaccgctta tccgccactg ctccgaatct gtatccatat accaccacca 300
 atccgtgtcc atataccacc accgatccat atccatatac taccaccgct accaccaccg 360
 ctgccatata ccaccaccat atatccacca ccaatccgag ttccttgcat att 413

<210> 8897
 <211> 398
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-055-Q1-E1-E3
 <400> 8897

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 gaaggacggc gagcacaagg agggcatgat ggagaagatc aaggacaaga tcagcggcga 120
 cggccacggc gacggcaaga aggacggcga ccacaaggag aagaaggaca agaagaagaa 180
 gaaggacaag aagcacggcg agggccacaa ggacgacgac ggccacggca gcagcagcag 240
 cgacagcgac agcgactgag ccagctccg cgcgctccg gcagcagcgt gcagtgtagg 300
 cgagatcgat gaacgcttgg gagaagtgtg gcatacatat atgttgacagg gtttgagcgc 360
 tgtggtagca tatgtatgta atgcgtgaca tgcctcat 398

<210> 8898
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-E8

<400> 8898

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gcgaaaacag tgtccagcaa attcccgtgt gggtaatatt tggattcata actctagcaa 120
agaggctatc tgggtgttgt agcagtctcc acccttggtt cgcaaggagg gcgagggttaa 180
acaggtgcat atccctgaaa ccaatcccat ccgcccgttt aggacgagtc atgtgttccc 240
acgacatcta gtggaccttc ctgtgacctt cttcatcacc ccaccaaaaa tcccttacca 300
ttttctcata cttgtcacag aaccctttgg acaggaggaa gacgcccata gtgaagcaag 360
gaagcgcttg aaccacagat ttgacgtgta cttccttggc cgcataagac atgaattttt 420
ccgaatagtc acaacaact 439

<210> 8899
<211> 483
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-055-Q1-E1-E9

<400> 8899

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cggagttcaa gcccacgctc accgtcgccg ctgacggcag cggcgacttc aagaccatca 120
aggaggcgct cgcaaagggtg ccgcccgaaga gcgcctccat gtacgtcatg tacatcaagg 180
ccggcaccta caaggagtac gtctccgtgg gccgccctat caccaacctc gtcgtcatcg 240
gcgacggcga cgacaagacc atcatcaccg gcaacaagaa cttcaagatg aacatcacca 300
ccaaggacac cgcaaccatg gaggcaatcg ggaacggctt cttcatgaag ggcgtgaggg 360
tgagagaacac ggcggggggc gagaaccacc aggccgtggc actgcgggtg cagagcgacc 420
aggccgtctt ctnacagtgc tacttcgacg ggttacaaga cacgctctac naccacgcgc 480
aac 483

<210> 8900
 <211> 405
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-055-Q1-E1-F1

 <400> 8900

aggcacggtc cagaagcccg ggtcgacggg gagcacaaga aggacggcga gcacaagaag 60
 gacgggggagc acaaggaggg catgatggag aagatcaagg acaagatcag cggcgacggc 120
 cacggcgacg gcaagaagga cggcgagcac aaggagaaga aggacaagaa gaagaagaag 180
 gacaagaagc acggcgaggg ccacaaggac gacgacggcc acggcagcag cagcagcgac 240
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 taatttggag cgtgtggtaa catatgtatg taatgcttga catgtctcat ggatcttgta 360
 atgtaataac cggctgcact gcatggtgct tgtaataata acgtt 405

<210> 8901
 <211> 353
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-055-Q1-E1-F11

 <400> 8901

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 ttaaatacatt tcttgggtggc aaggaatata tgtgtagagc agaatttagt cttcccagca 180
 taacctcgga agaagcaacc cctgaaaaga aggccccaat acgtgtgaaa tttgagatac 240
 catattttac tgtttcaggc attcaggttc gttatctgaa agtgatcgag aaaagtggat 300
 accaggccct cccttgggtt cggtacatca cgatggctgg tgaatatgag ctg 353

<210> 8902
 <211> 333
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-055-Q1-E1-F12

<400> 8902

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cgtggagtcg cgttttgcgg tacgccacac ccctcccaat gagatatgac ccccatcct 120
tctccccgcg ctagaacaga gatgcgcctc agtagggcag cagcagcagt agcgtctcca 180
tggaacgggt ggcatgacag ctcccaggca cggatccct cctctgcctc catcctccac 240
ctctccggtc ggctgttgc aatgtccgaa gcagcagcaa gcgacctgca gcagctcgtt 300
cctacgttcc atggacgagc tcgatggaga cat 333

<210> 8903

<211> 285

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-F4

<400> 8903

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tctttgggaa gctcctctgg tccgatggga cccactatgt gaggagcccc atcgtggtaa 120
atgccctgga ttgagatttt ttaattttgt ggtgtgtagc tcaagggaag gaagtgtcca 180
cagtttagga attttatttt tcagtttatt actgagaatg agaagagttt aggttttagc 240
tctcctggtt gctaataaac gctatttggc tctaaaaaaa aacaa 285

<210> 8904

<211> 475

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-F9

<400> 8904

cgggtcgacc ttcacatgac accaaaaagg gaatcacaac atacatacta tcaaaatac 60
gaacacattt caagttcaca tgattacttg caacatgatt tccccgtga cctcaagaac 120
aaaaataact actcacaagt gataaacatg atcaagatca aaggggtatt aaatagcata 180
atggatctga acatataatc ttccaccaa taaaccatat agtaatcaat tacaagatgt 240
aatcaacact actagtcacc cacaagcacc aatctatagt tccagtaaca agattgaaca 300

caagatatta actagggttt gagaggagat ggtgttggtg aagatgttga tggagattgc 360
cctccccaag atgggagagt tgcggtgat gatgatgacg atgatttccc cctctgggag 420
ggaagtcccc ttggcggaat cgctccgcca gagggcaaaa gtgctcctgc ccaag 475

<210> 8905
<211> 412
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-055-Q1-E1-G3
<400> 8905

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cttcacttat atctatttag agagtgcag gaactgggtca ttcacatggt tagtcataaa 120
atcctacata aacttgtaga tcgctgaata tgatatgttt gattccttgc aatagttttg 180
cgatataaag atggtgatat tagagttatg ctagtgggtg gttgtggatt gtagagacac 240
ttgtgttgag gtttgcaagt ccgtagcat gcacgtatgg taaccgttgt gtgacaaatt 300
tgaagcatgg ggtgtttctt tgattgtctt ccttatgagt ggcagtcggg gacgagtgat 360
ggtcttttcc taccaatcta tccccctagg ggcattgcgt ctagtacttt gc 412

<210> 8906
<211> 378
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-055-Q1-E1-G4
<400> 8906

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ctgggtttcc tcggagttag tctgacttct ccaatcacag cattgcagag ggaaaatagt 120
aatggggttg ataaatgcta accctgtgat tcatgagaaa agggagaggc gcatccggca 180
ggcaccagaa aacatagatg aaaatgcacc agaggccata taccagcttg aaatatttga 240
tcatattaga gacataaagg acccagaaca tccatactca ttggaagacc ttaatgtggt 300
aaatgaagac tcagtcgaaa tcaatgatga acttagtcat gtcacgggta ctttcatccc 360
aacagtggag cattgcag 378

<210> 8907
 <211> 415
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-055-Q1-E1-G8

 <400> 8907

aattcccggg ccgacgggga tgcggtggaa gacgatgatg gcgaaccacg aggacagccc 60
 gcacatccga gagaagggtgc tctacgccgt caagcgctac tggaccgccg acagcgacaa 120
 gagctcccaa gagaagaagg caactttcttc tgagggtgtga aatataatgg tgagtgagat 180
 gagctgagct gatgcactgc aactcaggag atcagcgtgt gtttatttca acttcttgtg 240
 agttttctctc gagtgtagca gtgagatcag cacgtgtatt cctttttgat tacgtcgtgt 300
 aggatgaaca cttcttttcc attttttcga gatgagatgg taggaaatat tcgacacaaa 360
 gatctacgta ccattttctg cccgtcacag attcaagaat gttgttatgg cactc 415

<210> 8908
 <211> 406
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB104-055-Q1-E1-H10

 <400> 8908

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 agtagaacta aaaccgagta catgatgtgc ggtttcagta ctactaggtg tgaggaggag 120
 gttagccatg cacagggtgg gcctcagaag gaggacacct ttcgatattt ggggtcaatg 180
 ctgcaggagg atgggggtat tgatgaagat gtgaaccatc gaatcaaagc cggatggatg 240
 aagtggcgcc aagcttcttg cattctctat gacaagagag tgccacaaaa gcttaaaggc 300
 aagttctaca ggacgacggg tcgacctgca atgttgatg gcgttgagtg ttggccgact 360
 aaaaggcgac aggttcaaca gttangtgtg gcggagatgc gtatgt 406

<210> 8909
 <211> 243
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB104-055-Q1-E1-H11

<400> 8909

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gtatatgctc  tgcggtttca  gatgaagcga  gaatgtctta  tcatgtttgc  ggcaaccaat  120
tcgcgactcg  gatcgaatac  atggggcgct  attctatttc  agctgtcgct  cgacaggatc  180
gattcttact  tacccttgca  tgctactttc  tagttcttct  atattgtcac  ctaacttcac  240
ttc                                                  243
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<210> 8910

<211> 425

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB104-055-Q1-E1-H2

<400> 8910

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cactattccg  aatgagaaga  attttgctta  tgtggagagt  agtaaatttt  ctatgcttgt  180
agatcatgaa  aagaatgctt  tatgtgatgg  ttatattggt  gaatttattc  atgatgctac  240
tgaaaattat  tatgagggag  gaatatatgc  ttgtaggagt  tgcaataata  tcaagtttcc  300
tctctatgtg  ttgaaaatct  tgaagttatg  cttgttttgc  cttcctatgc  tagttgatta  360
ttgttcccat  aagttgtttg  ctcacaaaat  ccatatgcat  aggaagtggg  ttagacttaa  420
atgtg                                                  425
```

<210> 8911

<211> 404

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB104-055-Q1-E1-H4

<400> 8911

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gttatctaag gctcaggctc aatgaagcat ttgacacaat agacagggtt gccaaaggat 120
 atttgtatgc tataagatac atgccagctt tcttacatca gcttcataat gtgatagcac 180
 atacttttcc tcctactcgt gttgtggaca agtcaacaaa tgaggctctc aagaatattg 240
 aggtggtagc tcataatctc aggacagaag caatagtctt gaaaacaagc tatatgtggt 300
 gagaaggcag agtcaagcgc gcctgaacat gtgtatcttg ctttcggacc aaatcctttg 360
 tacttgtgtg gaccaacttt ttaatactaa cggccttggt ccgt 404

<210> 8912
 <211> 293
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-H6

<400> 8912

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 acttatgggc acttgtgtat tggtttattg ctgggcatta tgccttgata ttaaagattt 120
 ccgcccagta catattgttg cattttgtga agaaaaaaaa aacaaaaaaaa aaaaaaaaaa 180
 aaaacagaac aaaaaaaaaac aaaacaacaa aaaacaaaaa acatcaacct aaacaaaaaa 240
 gagaacaaaa aaacaaaacc agcaatcact aaaaagtcaa aaaaaaagcg gcc 293

<210> 8913
 <211> 475
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-055-Q1-E1-H9

<400> 8913

acggtcaggt attccgggtc gaccggcacc cccagccac gaggctggg gtgttcggga 60
 taaacttgag cactcttggt cccatttttg ggtccatcta gggaggcgct caacacaacg 120
 aaccaggcaa ccggacttat aatgcttgaa cactctcact tagccataga attctataat 180
 tttaaatttc agcgaagccc ctagtcttcg gaaggccgaa tttggggcgc tatccacgcc 240
 tgggctggac aaagctggct cctcgtctta agcggcataa gtctttaggg acttgcaaaa 300
 aacctcttga acagcgacca gctctcgcct catcataacg gtcagtttta gctttctcca 360

ttgaggcact cgcccagctc aactggggcg caatcgcagt ggttctccca gtgctacctt 420
agtcgataca atggaacgta aggtaccaaa acatgggagc cgggcaaacc aacta 475

<210> 8914
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-A1

<400> 8914

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cgggcggttca gaagcagcgc taccagacc tgaccaaggc cgacgaggaa tgctttgaaa 120
cctgctacaa ggagctgacc aatggcgggc aaaaactcga caatttgtgc accagcaaag 180
agggctcgga cgacatcggc atggcccagc tccccgaaat ccgcagcttc atcaaggaga 240
acaacggggc gcatgccag tggaattgcg ataggtgtcg ccctgcgaat gacaagaaga 300
caccgcagca tgtctccaag aagaacgatg ccgagaaggc catggctgtc ctccacgtgc 360
tcgtcaacaa agtgaccaa taatgaaaaa c 391

<210> 8915
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-A10

<400> 8915

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aacttggaag ggaaggcgaa aacaggggaa atgtggcttt tggttaagggg gagggggcgg 120
ggaggaagat atttcacac aagccgaaaa attggaatcg cttcagcgaa aaaactggcg 180
cgcaaagtgt catcagacat ggtcccttat tcagaactgt gtatgatatg tgaaaatcac 240
aatgattca gataacttaa cccatgtgtg ttgagtttga acgtcaaaat ttttggttcg 300
aatttcctg gttacagtgg ccatccacgt cattgcataa tttgggtaca caaaggagac 360
taacttctta atcgagcaag ttcagcaatt aaacatagct agctgaccta aacattactc 420
taacaaatta aagaccgacg 440

<210> 8916
 <211> 427
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB104-056-Q1-E1-A11

 <400> 8916

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cggggtcggg cgagccgcaa aggtgcactg tctccttcg ccgtctttgg gctggccatt   60
gtgtgggttcc ttcagatgaa ctctgaggac gaggagtaca ttcctctctg atgtgggttcc  120
tcgctagaga tagggatcat caaattgtga atatctacag tacgatttgg agcattgggtg  180
tttgagcttg tttgtaccag tgaagtgagg cattttcagt tgcattgtaga gttatcctct  240
tcatgcagtc gtgctagtag atgatgtttg atgtttttgt gcaggctctt gacctcactt  300
gcatcactca gttgtttgct atggcatcac tgcatactct gcctagggtt ggccatttta  360
atttttctgt ttcctctgcc tgtgcctcga gtagtctcta gtantagttg ccacgagatg  420
ggagcaa                                           427
  
```

<210> 8917
 <211> 440
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-056-Q1-E1-A2

 <400> 8917

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cgggtcgacg ggtgctagta tttatgcatg ctatgataat ttgttttcct ataagatttc   60
tatgcatagg aagtatgtta gactcatatg tgtttgtcac atgttttatg atgctctctt  120
tgtgattcat ttgctatcat tcatgtgagc atcattaaaa ttaccaatgc ctagctaaaa  180
ggccttaatg aaaagcactt gttgggaggc aaccaaatat ttttcttttc tgtttttgaa  240
taagtaattc atctagccta tgttttagatg tgttttgtgt ttttaattag gtttgtgcca  300
agtaagacct ttgggatggc ttatggtgat agttgttttg atcttgctga aaaacaggaa  360
cttttgcgcc caggaaaata attttcattt ttttaaataa gcgtgctttt gatctgatta  420
tttttgcaca gattgcacac                                           440
  
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<210> 8918
 <211> 399
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-A3

<400> 8918

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 tggcaaattt aatacacatc tgggtgggtt gtttggggca cctagagaaa ccggtgcttg 120
 cccatgggaa tcccggagta ctogtgtgat taccctaggc ccgccacca ggctcaaagg 180
 aatcatatga tatttcatgc ctagaaactt ccgtgtgcag ccacaagcca ttatgggctc 240
 tggcatagtt gagtgagttg tgtaacctct ttcagtgggtg gactagcaga tgtaggggaa 300
 agtaggtgta tcggtctacc cagagtaaag agttaatgct tcagaaagac tatgtctcaa 360
 tcttccgatac atggatgtgg tcgagtcctg tggggaaaa 399

<210> 8919
 <211> 411
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB104-056-Q1-E1-A5

<400> 8919

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 agtactgtag caaaccaatt catattttat ttttgcattg tgtctacttt aatatagctt 120
 ttccatggct taatccactg atataaattg atagtttcat caaaacaagc aaactatgca 180
 tcaaaaatag aatctgtcaa aaacagaaca gtctgtagca atctgaacat tcactatgct 240
 tatgctaccc ccaaaaattc taccaaaatt aggaaacata aacaagttgt acatcaagac 300
 agttcaaaag gaatcagaac cgtttgacgt tccagttgaa aatgtaaaat cgtgcactac 360
 agccaaagtt tctgtcctgc ancgtaaaa ccaacatgca tttgtaacat c 411

<210> 8920
 <211> 427
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-A6

<400> 8920

acgggtataa tcacggcagt gtattttttt gtagtggttaa gatctgttag tataataaag 60
caaatacagca gtccaagtag tgtaacacat caattcatat tttatttttg cattgtgtcg 120
actttaagat agctttttcca tggcttaatc cagtgatata aattgatagt ttcagcaaaa 180
caagcaaact atgcatcatt aatagaatct gtcaaaaaca gaacagtctg taccaatctg 240
aacattcact aggcttatgc tatccccatt cattctacca gaattatgaa acatacacia 300
gttgtagatc aagacagttc acaatgaatc acaaccgttt gacgttccag ttgaaaatgt 360
acaatcgtgc attacagcca aagtttctgt cctgcaccgt acatactagc atccattgta 420
aacatct 427

<210> 8921

<211> 378

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-A7

<400> 8921

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tgtctcccaa acccgtaggg tctacacact taaggttcgg tgacgctagg gttgttgaga 120
tattagtatg tggttaaccg aaagtttttc ggagtcccg atgagatccc ggacatcacg 180
aggagtccg aaatgggtcca gaggtgaaga attgtatata ggaagtccaa tttcgccac 240
caggaaagtt tcggtggtca ccggtattgt accaggacca cttgaagggt tccggggctc 300
caccgggtgg ggccacctat cccggagggc cccatgggct gaagtgggaa ggggaacagc 360
ccctggtggg ctggtgcg 378

<210> 8922

<211> 471

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-A8

<400> 8922

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 agaacttgat gctttaatgc tatgggtggg ttttacctta atgatcttta gtagttgcgg 120
 atgcttgcta gagttccaat cataagtgcata tatgatccga gaagagaaag tatgttagct 180
 tatgcctctc cctcaaaaaa aattgcaata gtgattatcg gtctagttat cgattgccta 240
 gggacaaata acttcctcgt gacaaaaagc tctctactaa aacgaactta gttgtgtctt 300
 tatctaaaca gccctagtt tttattttacg tgctctttat attcttgcaa acctatccag 360
 caacacctac aaagtacttc tagtttcata cttgttatag gtaaagctaa cgctaagcgt 420
 gcgtagagct gtaccggtgg tcgatagaac ttgagggaaat atttgttcta c 471

<210> 8923
 <211> 420
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-056-Q1-E1-B12

 <400> 8923

cgggctccta gattggcaag gacaaatata cttccatgga ccaaaccaaa cggatacaaa 60
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 ctataccacg tgggcccggg tacctgtcca ggggcccact ggcccgcgcg ccaccacccc 180
 actgacacta taaaaagaac catgcgttca cagtccacgg tcacaactca gaccaacaca 240
 tctgtccag tcaaaactag ctcttagcca caagcagggt aaaaatttca acgaaatttc 300
 agtgaaattt ccgaaatttc agtgggggtgc gaaatatctt taaccctgaa agttcaatgc 360
 agttttaaag taaattcaaa ataaatttaa aattttgttt aaattcagta aaattaaatt 420

<210> 8924
 <211> 318
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-056-Q1-E1-B2

 <400> 8924

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 acagtttctt cttgtttaat tacttccgaa aatgataagg gctggtaaga aattgcacat 120

atacatcaat ttctgtaaa attgtccggg ccagaagtgt acctgcaaatt gtgggtttgtc 180
 tgtaacgcaa tgttgaaatt ttgtactgtt cttgactacg ttgtccctt ttctccggac 240
 cagtggggtg gttgatttca gcttattacc tgaagttgta gatatatcta tttgtcagta 300
 tggaaacatc tactgtat 318

<210> 8925
 <211> 240
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-056-Q1-E1-B3
 <400> 8925

aaattccaag gcccccaagg tcaaaaaggt caacaattcc ggctcaaatt gtcctaacgg 60
 aaagcacccc aagccaacaa tctgcgaaga tgataaatga caaatccggt gccatgggtga 120
 cacagtcctt cctaaggacg ttttgaaaag ctattgtgtt tcgtgccggc cattctacct 180
 aaatctcagt tgttttctgt tagagttatg tttcacgctc aagaataaat tatttctgtg 240

<210> 8926
 <211> 458
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB104-056-Q1-E1-B6
 <400> 8926

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 acttaagggt ttggcaaggt aactacaag caggagaaag aatcaagggc caaagagcaa 120
 gcaagaatat ggttgccata caaaccatca agttggacca gaatgaagat gaggttgata 180
 cactcaaatt tttcaaacaa catcattggg tttttgcata aagttgaatc ataagctact 240
 acccgcatcc cataattttg gtggaggcta gaaggaagta tttaaatgag ttgtagtga 300
 aaattgccc aatggaccaga gaagaaaatt ggggtgtagag ctcaaaatat ttcatagaata 360
 aaagacattt ttgcataaaa gtgatttaaa aacatcacct gacatctcca nattttggtt 420
 ggaacttta atgaatttat cagatggttg tagttcaa 458

<210> 8927
 <211> 404
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-B8

<400> 8927

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 agctttgttc atggatggct ggcttaacga aagctcacgc cgacgcctcc ggtgtggctt 180
 cccctaagcc tccagcatag ggttcttgta catgcgaaag tgcattgatt ttcgatgggt 240
 gtctagctgc agttgtctcc ccatgtaatg gcatcaagtt cagagcgccc caactgcctc 300
 tccttcgacc gtgggtcagg tagtggctcg gtctccactg tactctatcc cttgctctgt 360
 ggtgcctggc cattgtgctt agtccatgct gtgacccctg ttgt 404

<210> 8928
 <211> 411
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-C10

<400> 8928

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 tgcaataagt atgtgagttc tttatgacta atgttgagtc catggattat acacaccctc 120
 atccttccac cattgctagc ctctctagta cagcgcaact ttcgcccga ccataaacct 180
 accataccta cctattatgg catttccata gccattccga gatataattgc catgcaactt 240
 tccactgttc cattgttatg acacgcttca tcattgtcat agtgctttgc atgatcacgt 300
 agttgacatc gtatttgtgg caaagccatc gttcataatt ctttcataca tgtcactctt 360
 gattcattgc atatcctggc acacggccgg aggcattcac atagagtcac a 411

<210> 8929
 <211> 401
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-C11

<400> 8929

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tacagatgca acatgcagta catgatcata tgtacataag tgaagtgcag ttatcagcaa 120
attggtgctg cattgtttat tcaacaaaga ctgctgtaca ggcatcacga taaaaatggt 180
gcaataagca agggatggga ctgttacaca tgtccccctc caagggttaag ctgccgatgg 240
tgcttacaac agatttaatg ctcgtaatgc ataccacctg gatattcatt gtagccttta 300
tccttccctg tctgtatgca tcgtcagttc ggcaggtctg ctgccggcca gggcctctgg 360
cgaactgtgt cctacaggta ggcggcaaga atggaacaaa a 401

<210> 8930

<211> 345

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-C12

<400> 8930

cggggagcgt catgtattat attagtcttt gcttttttagt ttaccacaat catccttgct 60
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cacttatatc ttttgagctt gatagttttt gctctagtgc ttcacttata tctttttgag 180
cacagtgggtg tottaatttt gaagaaattg ctagtctctc attcttcact tatatctttt 240
tgagagtctt ttagaacagc atggatattg ctatggtttt aaagtgggtc ctagaattat 300
gagcatccaa gctgggtata ataaaaacta tcatagaaag tgaat 345

<210> 8931

<211> 167

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-C3

<400> 8931

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ttccttccgt tgtgccaagc tgggtgtgaac ttgtcctgct ttccgcctga cctaactgat 120
gcccctaatt ggggccctcg aaggaaactt caacactgga atccttc 167

<210> 8932
 <211> 403
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB104-056-Q1-E1-C5

 <400> 8932

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gggccgacgg gctcgacgac gtccttgtcc agaacaataa cagtgttatc tccgaccatc   60
cagcgggaaga gaaggcatag gccctggcgt tgcggtcccg atggcgaaag accatgcacg  120
tcacctgaa gtttgagagg ctgatgcccg cgtccgcgtc cgcacctctg ccgccgagga  180
gacagcgccc aacatgttgc cgctgtggaa ccacgctgag cgagggattt ccttgtagtg  240
ccgcacaagg ggatcgaga tgaggagccg tggcgcccg cacctgtgga agaggagcag  300
gaggtcgccc cagatatcgg cgagctcca gccgcaatcg gcaaattccc ccagcgggag  360
gaagttgagc gccagatttc gatcggcgat ggtgcccgcc cac                      403
  
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<210> 8933
 <211> 424
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB104-056-Q1-E1-C6

 <400> 8933

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acgggataaa cgagagagaa ggaagtgc ataatatgtg ttaatctgaa catacaaggt   60
ccatccagta gtcctacaat aaaagaagag ttagtatgta gttctagcac atcaaataca  120
acaggtttct caagctctac atttagtgct ttaggaaaga ttgacaagga caagatggcc  180
atggagttag ggtccctgca gacaagtaat ccaactatct caagtttcca gtgcacacag  240
tccttgagtc attcatctga attatcatgc tcttctcgaa tatcaacagg atctacccta  300
ccttccaaaa ctactaagga actggttggt attgagactg aatactgtgt ggccaaggct  360
tcacgtgccc aggttagtca actggggaaa ccttcttcaa agcaatccaa tgaagtctcc  420
tggc                                              424
  
```

<210> 8934
 <211> 433

<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-C7

<400> 8934

gacgggaagt acaactggaa gctgtactct gagaggttga tgaccctttc tgggtgtctat 60
ggtttctgga agtacgtctc caacctcgac aggcgcgaga ctcgtcggta ccttgaaatg 120
ctctacgccc tcaagtaccg caaaatggct gaaactgtcc cattggctgt tgagggcgag 180
acctcgggca aatgatttgt ccttaccaga gaaataaatg gcgggcgagc gctccgcttt 240
accgttcttg attcagtgat ggagcacaga tcggagcgtc ttatgccttt gcttgtcctt 300
tgttaccggt cttgattcag tgatgaactt tagttcctgt tgagtccccg tgttgtcgcg 360
gtaggggaac tggatggatg ctgtgttggt ggcactttct catggataca gtatttgaat 420
gaatgaataa aat 433

<210> 8935
<211> 442
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-056-Q1-E1-C8

<400> 8935

acgggcaact atacagagtt cctagagctc cttgtacggc ctggttgaaa acccgctgtc 60
ggacctgatt cattgccctt tgtttttcaa aataaagggg ttcgttttta gacttttcca 120
attgttccaa actaatagaa gtagcattaa tcaaatttgc tttttctcgt tctatctcag 180
agtatccatt cattcgatac tcatccgctt ctagttcgac tttctgtaat cgaatccgag 240
ctttttcgag ttgctcaatg gtcnctctac gcaattcttc tgaatttcga atagtactca 300
agatcctctg ttttcgatta tctaataaat cttttaatga aagtagatta ttttgtaagt 360
ttacaacttt tatgatctct tcccgaacca aacatgaatc tttcgattca tttggctctc 420
aagctcctta tttttttttt tt 442

<210> 8936
<211> 403
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-C9

<400> 8936

gacgggcggg ggcaccctcc tatctcgtgg aggctccggt tgtttcttga cttgcactcc 60

aagctctccg gatcttggtc gttccaaaaa tcacgttccc gaaggtttca ttccgtttgg 120

actccatttg atattccttt tcttcgaaat actgaaatag gcaaaaaaca gcaatatggg 180

ctgggcctcc ggtagtagg ttagtcccaa aaattataat ctctccctaa taataaagca 240

cgaattgggt ctccgggttc accgtcacia tgcgctttct tcttcccatg aatttacgct 300

ttcagttttt ctcacctaatt attattttcc acatccaagg tgggtactatt ttaactgtgt 360

atactaaatt caacatgcag tccgttcgta aagcctcgct cga 403

<210> 8937

<211> 444

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-D1

<400> 8937

ccgggtcgac ggggtgacaac atgaccttgc aggtgactct ggagcgcgac atgaccaacc 60

tgcccaactc cgaggtcggc ccggttcacg cccccagggt cccaagacc gaggaggaag 120

ggtggtggct ggtggtcggc gacagctcca ccaagcagct gctggctatc aagaggggtca 180

ccctccagaa gagggcccgt gtgaagctcg agttcaccgc cgccgaggag ccagggacga 240

aggactacat gatctacctg atgtcggact cgtacctcgg ctgcgaccag gactacgagt 300

tcaccatcga catcaaggaa gctggaggcg actaatctca aacacccaaa actctttttt 360

atactgggtt tttgctctta tgtagacaat attatgtgac ctggaactta tcatcttttt 420

gtctgtaatg ttacacctga attt 444

<210> 8938

<211> 359

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-D10

<400> 8938

cgatacgctc tatcacacat aaacctcctt atatcttcct caaaacagcc accataccta 60
cctattatgg catttccata gccattccga gatataattgc catgcgacat ccaccatcat 120
catcatgaca tacattactt ttgtcatatt gccattgcat gatcatgtag ttgacatcgt 180
atttgtggca aggccaccat gcattatctt tcatacatgt cactcttgat tcattgcacc 240
atcccgggtac accgccggtg gcattcatat agagtcatat cttgttctaa gtttcgagtt 300
gtaatcctta tgttgtaatc aatagaagtg tgatgatcat cattattaga gcattgccc 359

<210> 8939

<211> 410

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-056-Q1-E1-D12

<400> 8939

ctggaacgag caaggttgat gcacagtag agttctgaag atggagcggg ggcagttggc 60
ggcggcggcc tetgagagca cgccggacca gtgtgtgten catacccgcc aagtggctag 120
gttgggtctt cgggtcttag atgttaggct tggtcgcat gtctatttgg tattaggccc 180
aggctatctg cgcccttca tcaactgaat aggtgtagcg acagtttggt gcttgacgg 240
cggctttagc ctactgttg tatggcttg taaggcttg tgagaataat taataaaatg 300
gccgtatgca tgcgccagat gcagaggccg gggtcactct ctttttctaa aaaaaaacct 360
aggcgttacg atttttagcat ggccatgaat caaccagaac catcgacaga 410

<210> 8940

<211> 391

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-056-Q1-E1-D2

<400> 8940

ccgggtcgac ggggaggaag agccacgagg aggagctagg aactgaatat ctggtgcagc 60
cgcttgccg tgctgaagac gaagagcatt ccagtgactt cgagccagaa gaaaatggtg 120

atggtgctga ggacgaagag attgaggatg acgatgctga ggatgggtgag gatcctgtca 180
 aggcgcaatc ctcacaaaag aggaagaggt ctggtgggga agatgaagat gatgacgacg 240
 gtgatgatga tggatgatgat gatgagaagc ctccatcaaa gcgatagtca atttggtcgt 300
 gctgatctgt gatcttctct gcttgggcca agaaggaaaa taatcctcat ggagaggatt 360
 gttgggaaat gctgtacctt tangacatct g 391

<210> 8941
 <211> 226
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-056-Q1-E1-D3
 <400> 8941

aaaactggca agtcctgtat atatagccag agcatccgtc ccggttggtg gtcceaaccg 60
 tgactaatgc cccctttaat tccggttggt gccaccaatc cggactaaag ggcattgtct 120
 gccgcgctcg cgacacgaaa gtttaatccc aactcgctaa ctgaaggaaac tccaaaatgg 180
 tttaaaagcc ctaatcccg cgcctctcg aactccttcc aaatgc 226

<210> 8942
 <211> 365
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-056-Q1-E1-D4
 <400> 8942

cggcatgttt atcaagaaag ataactcaga tggcactgac atcttcgtta ataaagtaat 60
 taccacaga taggtaggtc accgttaatt actggtagtt tgataattac cccttcgaca 120
 gcaaaaacta tatttaaatc aaaccttgag cagattttgg acacaataaa ttccttgag 180
 taatttaacc tactaatggt cacacaaact aacgaaccat tctaataaat cataaactat 240
 acaaacacat gctatgattt aatgggtata acataattat aataatataa aattaagtaa 300
 tagaacatgg aaagtgtaca aatcaagtac accagtttcc ccataataaa cgtactacta 360
 tgttt 365

<210> 8943

<211> 446
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB104-056-Q1-E1-D6

<400> 8943

acgggtccca taaacgctga tgatccacaa accgcttccg ccatcaacca ctagaaacca 60
 tttgttgtag tcacagacca taatgggtctt gtactacata tgttgtagttt tgcattggaat 120
 ttctgtatca agttgggtgcc tcatcagcta acagttatcc tggggctgat gagcacaagg 180
 gccattttct gggaattaac acccgagat tcgggtcgcca cagacttggg atcagagcca 240
 ggctgaccat tggctaattc tatcttagcc aggtcggata acttaggtaa accaacctac 300
 gagaccctaa ccaaaacccc agccaagctt ctctgtgcaag atagccacac tgtggtcncg 360
 acactttttg cagtcgggtgc ccaacctatc anattagcct gtcgatacaca taccagttga 420
 cgatggcaaa aatgtctcat tcgcaa 446

<210> 8944
 <211> 364
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB104-056-Q1-E1-D8

<400> 8944

attcgcgggc cgacggggga ggcgaaacgc aagaccgcaa gttattccag taccgcatc 60
 ccgccgtcgt cgccgccgtc tggaatcgcc tcgccaccgc ctggattcgc cctcgacccc 120
 gactgcaaac gccgtctgcg tgccgccgcc cgccgcgtgg ggcagatcaa ggtgcctcag 180
 actcatcttt caacaacatg gatggcctta gactcccctc aaccattggg aaagcaaaga 240
 gctacgcata ttcttcotta ggagctctgc gaaagaagat gcctcaatct ggaagccgat 300
 ctctacacac aagtcgcccc cggtcagctc ctgttgcan a cgcaccaatg gtcccccat 360
 ctcc 364

<210> 8945
 <211> 357
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-E1

<400> 8945

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ggagcacaag gaaggcatga tggagaagat caaggacaag atcagcggcg acggccacgg   60
cgacggcaag aaggacggcg agcacaagga gaagaaggac aagaagaaga agaaggacaa  120
gaagcacggc gagggccaca aggacgacga cggccacggc agcagcagca gcgacagcga  180
cagcgactga gccagctccg gccgcgtgca gtgcagggga gatgaacgcg tgggttaatt  240
tggagcgtgt ggtagcatat gtatgtaatg cttgacatgt ctcatggatc ttgtaatgta  300
ataaccggct gcactgcatg gtgcttgtaa taataacgtt aaggaatttc cattgggt   357
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<210> 8946

<211> 135

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-E11

<400> 8946

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tcaccatcgg ttgtacttta cttctctctg agtaccaacc tcatgttgca atgattgact   60
ggtgcttttt ggttccagtg aatgctttga cttgatgtg gcaactggca accatgtttc  120
ttttgatgtg tgtca                                     135
```

<210> 8947

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-E2

<400> 8947

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gggtcgacgg gagcaaagaa cttctcctat ggaggggacc atagacctca gtgtcatatc   60
atcatcagat aaaataggtg taggtagtga tctgaatgta tcgtcaacca gcaccaactc  120
agagctaacc actgattcat agaaacgcct tgctggatcg aagtcgtctt tgaatatttc  180
atcagatgta ttcagctcag ctgcatctga ctgaacaagc attttgaaga catcctctga  240
agggaaatca atgatctgtg cttcttctaa aagaactgag caaggcaaat ctgaaaaggt  300
```


gccatcaggc ttgagaggt acaatgctga gtttctctca agtagaagat tatcattgat 360
tctcacaaga tccatctcta ctgcagcctt aactgttatt ggtttatctg cttgatagtc 420
tgcacatggg gcatctttgg aaaca 445

<210> 8948
<211> 119
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-056-Q1-E1-E3
<400> 8948

aggggttttc ctccaagccg ggcaagtcca atgtccatgg caattggaat ttttcctcca 60
gaaaaatgaa tccggggaag aaaaaaaca gattcttccg tttttaacgg cgtttaacc 119

<210> 8949
<211> 297
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB104-056-Q1-E1-E4
<400> 8949

gtgcccctaa gagaccagct gaagtagctg gtcgagctcc acaaggcggc cgaacaggtc 60
atgaagggcc tcatagtctg gctgtggcct aaggaggcca tgcctgggag ctactttggc 120
ctgntgcggc ggctgggtga tgcgtgctcg tgggttgaag tcatcaagca ctccgcctgt 180
attgaagggtg cccgtcgggc ccttgcccgc gcaaagggtgc actggggcaa gatggatgcc 240
cagaagctcg tgacggaccc gccaccagag ggcaaggagc attacacgcc cgagatg 297

<210> 8950
<211> 401
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-056-Q1-E1-E5
<400> 8950

attcgccggt cgacggggcc caccaccaa caatgctcaa tgttcatcca gaggcagcat 60
caaccggctt cagtttagcag cagtagcgaa ggaatcactc aggtcagtt aacagcaagg 120

gatcgatcga tcgatcgggt tcagtaacgc gtagcctgca gtgcaatcgc tcgggttcag 180
taggcaaacg cctcgcctcg gttgtcatat ggatgatacg tctccaacgt atctataatt 240
ttttatgtat tcatgccatg tttataatat ttctacatga ttttggtatg atttgattag 300
aactaacgtt gatttcagta gaactatcgt ggtgttgttt ttgtgcagaa ataaaagttc 360
tcggaatgca ctgaaaatcg acggagattt tttctggaaa g 401

<210> 8951
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-E6

<400> 8951

acgggcacat aaatcctatt tgcgacaata agaacatcat taatccttcc cataggtttt 60
ttaatagtgg aatccgcaag atgcaaattt aaaagaacaa tcatcaaatt cacggaaacc 120
taacacatca cataaagttt ttcgaatcat ggaaacgcta gcacccaaat cacacaaagc 180
atggcactca taatctttta tcttaatctt aatagtaggt tcccactcat cataaagttt 240
tctagggata gaaacttcca attcaagctt ttgttcaaaa gattgcatca tagcatcaac 300
gatatgttta gtaaaagctt tgttttgatt ataagaatga ggagaattca acctggattg 360
caacaatgaa atacaatata ttaaagaaca attatcataa ttaaattcct tgaaat 416

<210> 8952
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-E8

<400> 8952

attcgcgggc cgacggggcg tactggaaaa gatgctcgaa ctagcacctt gcccgagacc 60
ctcaaaggaa gataaagggg ggaataatga ggtcgaaagc agggcccat cgctaccaat 120
tccaaccgag ggaatgagcg cctccgtgaa ggaggataac caaggggaag aatctgacct 180
tctctcgctt cgaggaatga agaggactgc ctctgaagat ccggaaacca aggcttccaa 240
acaggagaag aagtctccac cagagggttc tgccttggag ggtgcccttg ccgcacaaag 300

tccgcgcaag gatcagccct ccaatgagct gtaagtaatc aaaaagtact ttaatagtgg 360
 agatatacta ccttacctct gagggaaaata accgaagcat ttatcttgca gtttgga 417

<210> 8953
 <211> 401
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-E9

<400> 8953

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 atcaagtggg ttccatatca ttatctccct cgggcataag tgacaccga cgggggtttc 120
 caaaagttct ttgaaaatag tttgtctcct tcaccatgca tatacccgtc cctttttgca 180
 tagcgtctac tttagcatcc tatctactcc caccggcata accctcatag gaaggtaggg 240
 tcatgcccaa tgcaagtatc aacaaggaag taacgaaggc aaccaccaa agtggttacc 300
 acctcatcat gattccaatg caacaataat aaagtgtat atgacatgta taaaagggt 360
 ttcgtaaaca tgggtcaaaag gggctgcttg cctgttttaa c 401

<210> 8954
 <211> 439
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB104-056-Q1-E1-F1

<400> 8954

gggtcgacgg ggctatatca acacacaaag aaggcaagaa ctgtagtaag tacgtacgta 60
 ggtgtagcac ctcatcttgt actgcacacc atggcgataa tgaagaagaa cacgagctcc 120
 ctgagcttcg tcgtggccgc cctcatcgtg gtcatggctg ccacccttct cctctcctcg 180
 tgcgacgccc gcaaagagaa ggataagccc accgcttccc ccgtgtcggg gaagtgttc 240
 tcgaggtttt tcccaaactg caccgagcag cgatgcaaga agttctgcgt ccagccactc 300
 cccggagccg tctgcatcga caaaaccac tgttgctgcc ctattgctta gttataagcg 360
 tcgttgaagc gatcgggcta agaaatagta ctggttanag atggcaacaa gcaatatttg 420

tacacttcga aatatatac

439

<210> 8955
<211> 399
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-056-Q1-E1-F10

<400> 8955

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gtggcagcgc agcgtggacc ctgtgttcga ggagttgtta tattgatata tactgatatc 120
atatataact tcggtggacg ctggacaagg tggacagggg cttcaaattg tatccccata 180
caaaatcccg tccccaatc tacaagccac ctgaccaggg aaacctactc tccggtctcg 240
tggctgcgaa taattttgag ctcggaacac tctgtttgtg gcttgccgcc tttctttttt 300
cggctgtgtg gaccttttac agcttctgat ttttctcgca tctccaggga gccggaacan 360
acacctgttt tgtaagatcc ctttttcac ttttcctga 399

<210> 8956
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-F11

<400> 8956

aggggatgga caacttgctc cgtccctgat gggccgttcg aacgtgcgaa cctggaggaa 60
caccggttct ccatgacacg ggcaatccgc aactccggat gaagcctgtt ggctggcatt 120
ggcatggcac gccgcgcta ataaaacgtg atgccattaa atgccctctg cgttcctcct 180
tgggctgcct catcgacgta acggcatggc tttgtaactt tgcattgcc tccatgaaat 240
aacctgtaga tatccgcttg tgtggtccgg ttgtttgaga gatgtggcgc gagagaaacg 300
cggctcttaa tcaaaaattt ctgcctatg cagcgagtca tcaatcaggt taaagcccga 360
tgagggtttc tagttgaaga tggatagcaa aatctggatg ttc 403

<210> 8957
<211> 459

<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-F2

<400> 8957

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ccgggtcgac atgattatgt aattatgaac gggctcatgt actccctagc cggattgaaa 60
atcatttatac atgacggacc ctttcgcttc agcccccgga tctgacagtc cggggtgtat 120
ccgaataccc acacagttat gaaaacccgg ggtatgctg gaaaccatgt gtaggggtca 180
taagtgtttg aacagacaag taccctaacta gttaagttat attacatgga tagtaagaaa 240
catcttccag atagaatagt tccgttaggg gttcctttct ttgggtacgc atgcatcgat 300
gtgcatgtcc gaactgcgaa cagaagcgca gaaaacaaaa catctgggta tttttgttgt 360
tctgaacgag aacatctttt gttcacccgac cgaatattcc cttagaacg ctagctttcg 420
gcttcaccca gtctgaggta cacatccggc tcaaccggc 459
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<210> 8958
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-F3

<400> 8958

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gggtcgaccg ggataaataa acagtgtact acaatgttat agccatataa tccgggaata 60
acaatgtact gggaatcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaacg ggcgccccaa 120
attgggactt ggccaactg gagagatgaa ggacccatcg tctcctcaaa gccaaggatg 180
ggtcttccca agcatcggag aattcatctg ttatgataag tacctggaag caaacttcaa 240
agcagcagcg gcgaaggctg gccaccctga gtgggaattg cctgacgatg ctggagagta 300
caacgacact cccgagaaaa cccaattctt caaggacaac ggaacatacc tcacagagaa 360
agggaagttt ttcctgtcat ggtactccaa caaactga 398
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<210> 8959
<211> 432
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-056-Q1-E1-F4

<400> 8959

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tgggctctag gttaataggt tagtcccaaa aatcatataa aatagcatat aaaacatcct 120
agatggataa tataatagca tggaacaatc aaaaattata gatacgttag agacgtatca 180
agcatcccca agcttaattc ctgcgcgtcc tcgagtaggt aaatgataaa aacagaattt 240
ttgatgtgga atgctaccta acataatttt caatgtaatt ttccttattg tggcgtgaat 300
gttcagatct aaaagattca agataaaagt ttaatattga cataaaaata ataatacttc 360
aagcatacta accaagcaat tatgtcntat caaaataaca tagccaaaga aagctcatcc 420
ctacaacatc at 432

<210> 8960

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-F6

<400> 8960

gactgctttc tttgacctgt ctgagtttac caattaaagc ttacccttcg tgtttcttgc 60
cggtcagtgt tgtcgtttac aagggttggt atgtctatcc tctgctaccc gcctccatta 120
taaaccctcc actagactaa ctgaaataaa aattattaag catgatccgt ttatcagttg 180
aactgttaga actaataacc aaaccatgct aacatcaatt ataaaagaaa ataatagtgg 240
tgatttttgt accaggaaaa aaattacctt ggaggataat tttggttgtc aaaaagttgt 300
cttgtcgttc aaccaaccat gaagttatgc caatttaaga ggatagaatg gaactaacgc 360
aaaatgtact cattagattt tgaaaagaac atgatccctt tactgtatta tttagttaat 420
tatata 426

<210> 8961

<211> 436

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-056-Q1-E1-F9

<400> 8961

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cctgtactat atagaggtga tgatgtgtgt gtttgtgcac cttactgcat atatatatac 120
acgtacaagg aagggcaaga catttttgct tgggagggga gggagcttgc ttgtgtgttt 180
gctttgcgtt tgttgctgtt tatacctagg gtcgggctcg gtcggatgtt ggttcaattg 240
cacatgtttg gctggatgaa tcgtgcttat aaacattctt tataccttgt attgtacaag 300
ttagtgtcag tcggtcgatc actttcagcg gatattggac aatttctgag ctttttctcc 360
atgtattggc atttcttttc tgttttcctt ctttttcttt ctttctttct ttctcctgn 420
tgtacacgtg ctcttc 436

<210> 8962

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-G10

<400> 8962

cgggttctct tacttataca aatcattcat gaatttcttg taggatcaaa atggccatgg 60
caaaccttca aagaatttaa tttccaaaac caaagggtgaa ccaatacaag gatgaaggac 120
aaataattca aatcaagata ttcaattcat tcaaacaatt ttctcatagg atataagtga 180
agcacaagag taaatgacaa actactccaa aaagatataa gtgaagatca agcgagtagt 240
taagtaaagg ggtagcta at tgaggactct ctcttattta aaaactttca aatctaagta 300
ttttattaaa acagcaagca aaatgaaaac aaaatgacat tccaaggata gcacacatca 360
tgtgaagaag cagaacttag gctcaaccga ggctaaccga taattttt 408

<210> 8963

<211> 386

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-G12

<400> 8963

acgggcagggt gcaccccgga gacgcgcca accccaacta cttcgaccg cgatacctgc 60

tgtcaatgta cggcaacccc ctggggggacc tgctcaaggg ggcctccctc tggacaaggg 120
 ccggcaagga caaccgcaag ggccccgtct ccttgctcta ccgcgcctcc ggcttgctcg 180
 tccccggcct cgctccccc agcccgcgcg actacgtcaa cgccgtccgc ctcggccgta 240
 tcgcgccc aa gtcactcctc taaaagtcta actcagaccc actgtgtgtg tacgaccaca 300
 agagagagaa ttggtgatga ataagttggt gtttcggttg tgcgtgtcg tgcgtgtcg 360
 tatcgtgtgt gtgctatatt aagcct 386

<210> 8964
 <211> 240
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-056-Q1-E1-G2
 <400> 8964

cccggtcga cggcggtaca gagtataccg gagatcgggg tgatatagat tgttaggtcc 60
 gcagtttgcc acttggtaat gtcctcccc taaatagcgc tgcattgcca tgtgtgcctt 120
 gctctcagca gggaagttga gttgttgat gttgtgtagc agaacgatgc tttctgcctg 180
 tggaagtaaa acataaagat tgcctatgtg tcatgactca aatggtattg tcacctactc 240

<210> 8965
 <211> 280
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB104-056-Q1-E1-G4

<400> 8965
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 gattacaatg ccagaacaa ggatttggtt caccttaacc ttgaggcccg gatgaagggt 120
 gggttctatg tcagtcctga ggctaagctg ctgtttgttg tcagaatcag aggtatcaat 180
 gccatgcacc caaagaccaa gaagatcttg cagctgttgc gtttgagaca gatattcaat 240
 ggagtgttcc tgaangttaa caaggccacc atcaacatgc 280

<210> 8966

<211> 430
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-056-Q1-E1-G5

<400> 8966

aattcgcggg tgcacgggga cgaccacccc cttggcgggc gccttctcag tcttctttgc 60
 cgggcgggggt cttccttctt tggtttctt taatccacct tctgcaggct cgacggcgag 120
 cttggcttcg acttctgtg ctaagcctcg cccctcatcc gtatcaaccg cgatcgtgac 180
 ctctcgctcc atggagtcgc cgttgtcacg cacctttgca tcagggtgctt gttcctccgc 240
 ctcggtgaag ggcattgtctt gggatgatgc acggttcttc tcctcctttg agcaattggt 300
 attgtcatga acgggtgctg ccatgacctg ctgaacattc gatcgaaaag tgagacatca 360
 aagtgactaa catccgacat caaaccaaca atctaccacg tactaagtcc aacagcccat 420
 gttcatatgc 430

<210> 8967
 <211> 454
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB104-056-Q1-E1-G9

<400> 8967

tagccgtcaa aaattctagg gtcgacgggg gaaaagaggg agcaaagcaa ccgtgagtac 60
 tcatccaaag tactcgcaag caaggatcta cactacatat gcatgggtat atgtgtaaag 120
 aggcaatatc ggtggactga actgcagaat gccagaataa tagggggata gctagtccta 180
 tcgaagacta cgcttctggc agcctccgtc ttgcagcata tagaagagag tagattgaag 240
 tcctccaagt agcatcgcat agcataatcc taccgggga tccttccttc gttgccctat 300
 ggaaaagcga tcaccgggtt gtctgtggaa cttgtctggg tgtgttttat taagtatccg 360
 gttctagttg tcataaggtc aagggtacaac tctgggtcgt ccttttaccg anggacacaa 420
 ctattcgaat agataaactt ccctgcaaag gtgc 454

<210> 8968
 <211> 287

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-056-Q1-E1-H10

 <400> 8968

 catggcgaaa gccgggataa gatggccaag atggccatag aattaaaagc cgccgtttga 60
 ccgttgccgg gttcttgga aaggaaaacc taaccaaagc atcggacttg agaaagctgt 120
 tgcgacgagg aaagacatcc gctctgctat gagggcgaag aaggaggagc tgcgggaagc 180
 cggggatatg gtagctggga aatcgtttat gttgcgagg aagttcggag attcacggta 240
 tgccactctg gatcggctgt ggagttcgga gaatgtgtat atggatt 287

<210> 8969
 <211> 383
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB104-056-Q1-E1-H11

<400> 8969

 tatcaaatct anaaaaaatt ttaattcgga tagtccaaac caaaattacc cccggaaggc 60
 cggaaccaa tacaaccaa attggtgggt ttttaacaa tcccggaaaa tcaaaccgcc 120
 acaaaaagg gccaatccc caagccaagg aaatgacgaa cccaccaa acgaacaccg 180
 aagtcaaaag actttccac aagaagtcaa aacagtaa ac tcaattcatg tgatagtacg 240
 gaaaaccaac acggcactcg ctaagacaag tgctgcacgg tccaccccag cggaacaccg 300
 atattggatg tcaaaaccaa tcaatttcga ccatctggat acaacanaca gaccgtcaag 360
 taaaaaaaaa aagcggccgc tct 383

<210> 8970
 <211> 397
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-056-Q1-E1-H12

<400> 8970

 tttagctcgg atatgtcaaa tccacagtac ctccggaagg cctgcaaacc ataccaacca 60

aaattgttgg gtttttaaac agtccggcag actcaaggcc ggacataagg ggctcgatgc 120
 gccaaagcgag gacaatgacg aacccccacca gcagagcacc ggaggtcaaa agactttccc 180
 acaacaagtc aaaacagtaa actcccttca tgtgaggcta tgggaaacta atatggaact 240
 cgcatatgag caagtgtctc attgtctaca ccatgggatc atcgatattg catctaaaca 300
 tgaacaatth tccaacaacg ggcattgactg caatgatttt actataaatt ctcttgaggt 360
 ccactgtgag atcaatacgc aaaacctcaa ccttggg 397

<210> 8971
 <211> 172
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-056-Q1-E1-H2

<400> 8971
 gaaccacaag aaagacggcg agcacaataa ggacggggag cacaaggagg gcatgatgga 60
 aaaaatcaag gacaatatca gcggcgacgg ccacggcgac ggcaaaaagg acggcgacca 120
 aaaaaaaaaa aaaccatcaa aaccaaatt taaaaaaaaa aaccgcccc cc 172

<210> 8972
 <211> 400
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-056-Q1-E1-H3

<400> 8972
 cgggtcgacg gcggatcgag aaaaagacgt acgactactt cctctacgtt gtgtcaacgc 60
 ttccgttgca accaacaagg gtacttaaat tatgcccttc cccccgttgc aaggcaccac 120
 aatgatcttg cttgtgcata ggaaattttt tgaaattaca actttcccaa acattgtcct 180
 gatccagtca ggcagccgga ccatcgggtt ttggccatga gctgggacca ctgggaagcg 240
 gcccgccacg cggaccatga gaccatgcc aaggccgtga tcaactattt ctgggtgagc 300
 tctcttcaga agcacaagtc cattctagtt tcatgaatga tttactcat ggcttcttcc 360
 attcttgttt catgcatgat tgtagaaatt ctatcgggtt 400

<210> 8973

<211> 288
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-056-Q1-E1-H4

 <400> 8973

 gacgggccaa aagaagatgg aagcgggtgc ggagggcaag gcccatatac cctgaaataa 60
 gaaagacggc cctgcccctg atgtttggca ggaaaggggc gtgtgttagc tgatgtaatg 120
 ttacacogta gaatcatcgt tcgtgacgat aataatgac cgaccataac tcctctaata 180
 tcattgttct gttgtcattg tgtagtttac tctgtatctg aactttgttt tactcagcga 240
 aaccgtactg ctatgatgaa tgttttcaaa aaaaaaaaaat ttttgggt 288

<210> 8974
 <211> 356
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB104-057-Q1-E1-A1

 <400> 8974

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 agaggagaaa tgccggcagc tggaattttg gacttgaaaa tgagcaaata ttagagacct 120
 attctgcaca actccaaaag tcctgaaact tcacggagat tagttttgga atatattaaa 180
 aatactgggc gaagaaagca ccagatgggg accaccagtc agccacgagg gtgaagagca 240
 cgccctagcc cctggggcgc cccctacct cgtgggcccc ctggcagtc cgcactccca 300
 tcttctgcta tatgggtgtct ttttccctgn aaaaaatcat agagaagctt ttggga 356

<210> 8975
 <211> 447
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-057-Q1-E1-A10

 <400> 8975

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 tttatgtgca tgtacacatc acacagacgg tcagcaagaa cactcagaat gcattcccaca 120

aacatagtat tggcttctctg gaattttctc cgatcttcgt cggtcattcc ctctggagca 180
 tcaacactag cgtggaaaac tttcagagca gtaagccaga gtgttgtctt cacctgccac 240
 ctcttaaagt gcacaccgat aaacttatcc ggcattcagt catcagcgaa tccagccata 300
 gttaactcag gaaattgcct agaattaggt ttttggattg ttggaatata aggcaagttc 360
 atgattaatt ccagtaaata attcatgact agaagagata ctagcatgca ataattctagc 420
 aaactagaag accagcagga catgcat 447

<210> 8976
 <211> 411
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-057-Q1-E1-A11
 <400> 8976

cgggccgacg gatgactcaa acgatagacg gcggcttcat ccacgctccg gtcccttgag 60
 tcgagtcgaa agcagtgatg ctgtgtctag ttctgaaaca tcgattgtct catgttgtaa 120
 ttaaacttta atgaacttgt agtatgtctc tttggtttcg agagtcgttc aacttagatg 180
 taatcgatgc tattaatgtc ttgcttttct cttccgatcg ttctgttgca tacttatata 240
 ttgcttatgt attgtctgtg aattgggtact aacgtttcgt ttggctactg catagcgatg 300
 ccgtgggatg tcgtgtacaa gggtaaggct cccggagtct acgacgactg ggaggagtgt 360
 cggagacagg ttcaccgatt cagcggtaac aattacaaag ggtacgccac t 411

<210> 8977
 <211> 427
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-057-Q1-E1-A12
 <400> 8977

ccgggtcgac gggagcatcg agccgctctg gggcggcgtc gtcattaccg ccttcgactg 60
 cttcatcttt ctattcctgg agaactatgg tgtgagaaaa ttggaagcgt ttttcggcgt 120
 cttgattgca accatggcta tatcatttgc gatcatgttt ggtgaaacga agcctagtgg 180
 aaaggagctt ctgatcggta attctctgtc tgatatgttg gcagatgctt ttgtttctga 240

tgcactcttg agacgtagaa gaattttattc agtatttttc ataattaggt ttggtgggttc 300
 caaagctaag ctcaaagacc atcaaacagg cggttggaat tgtgggctgc atcatcatgc 360
 cccataatgt tttcttgcac tcagcgctag tgcagtcag gaagattgac acaaaaaaga 420
 aatcccg 427

<210> 8978
 <211> 216
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-A3

<400> 8978

acggggaagt ggaagaccta aggtttatta atctgtgaga ggtgtaggat gaagatggtc 60
 tctctcaaac gaacctgcaa tcaaatacaa gaaatctctt gtgtcccca cacacctaata 120
 acaatggcaa attgtacagg tgcactagtt cggcgaagag atgggtgataa aagtgtata 180
 tggatggtag aaatacattt ttataatctg aataaa 216

<210> 8979
 <211> 322
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-A4

<400> 8979

gggtccacgg gccatgataa aataagctcg agcacacatc aaatcctaata cacatccaca 60
 taagatgcat gacaccaagc taacagggtta tttccagaga catgtctgtg atatactcgc 120
 acgcaacgtc caggatcgat cattctgtga tatgaacatg cattgccaca tagctttgca 180
 tgatggtagc atatctatga tgatgtttcc agagcttgtc cgtttgtgac gtcgctgtga 240
 tgcaagttca atgtccaacg cggtagactg ccggaggcat tcatataaac tcaggtcgtt 300
 gttcaagttt cgagctgcaa ta 322

<210> 8980
 <211> 379
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-A5

<400> 8980

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tcgaaacgaa cgaccctttc gccatgtcca acagctttgc gcccccttcc aacatccggc 120
tggcaatggg gaccagcag cagcaatact tccaggctca acaacatcag cagcaatact 180
actaccagcc tcagctccaa tactaccagc cccagctgca gcagcagcat cagcagcagt 240
atttccaggc tcagcagcat cagcaccagt atttccagca gcagccccag tattgtgtgc 300
atccggccgg aattacaat ccgtttggg accctttcac tgaccttgta actctggctg 360
ctccttcaaa acaaggcga 379

<210> 8981

<211> 315

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-A7

<400> 8981

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taataaagtg gttgtatgca tagtccagat gcagaggccg ggttcctcct ttttcaaaaa 120
aaagaaagaa taatagacag gcaccagcaa ggtcaagtga aagcatgcat ctgcagcagg 180
tgatcagcta agacaactat ttgcgtacca atcaatgtaa aaaatacaac ctttaatttg 240
ttcattgtag caatgatacg gtgctagttt aaagtaattg taccagaaaa ttagacaaaa 300
gacatcccaa gtttt 315

<210> 8982

<211> 273

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-B1

<400> 8982

gacgggctaa cccaacttct ggcaacagga gtgctacgta ccattagtta gttgagagat 60
gtactatccg accgaggcat tgtatttgta acctaaagag tacaggggga agtggaaaca 120

cgcgcatgat ttggcattcg tcggttaagtc attggaaatg ctcttatgtg agatactatg 180
gaggcctgct tgatgaccaa cacaaaagtg atcgccctcca accttcttct ggttggttga 240
ttaacacaca agaaaaattc tcattgaaac aaa 273

<210> 8983
<211> 405
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-057-Q1-E1-B12
<400> 8983

ccgggtcgac agtaggcttc atataaatgc aataaatcca ttagctgatg cgtcctatca 60
ttagctctta tcaataattc tattaaattt tgaagctgac ctgtccgccc gttggctttg 120
gttgccacaa caacggattg cttgggatac taataggatg gcttgggatt tgggagtagc 180
attcccaaac gtgttactat catatttggc ttgcagtggg tgtgcaggag gaagatgttg 240
cttgattgga gtccctcgga gcctagcagt gctgctcage cctatgcatt ccattggctg 300
cctcggtagg taattgggat cctcacgcta ccaatttggg catccctagg aaacatcaag 360
gagatgatga gactgcatct tgagaagaag cattattttac aactc 405

<210> 8984
<211> 444
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-057-Q1-E1-B2
<400> 8984

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tcatctgagt tgatcataag aggtaatgac aaaggtagt atcttccatc tctacatgag 120
aatgatgaat gccttgtaaa tttgaatgca ccatctgatg agctaccac tactttgatc 180
acaccaccta ttttagagga ctacgttgat aatttgactt tgccatgtga tcaaacaact 240
gaaataccaa caattttgag tgcacccatt gaattaacta ttgatgcaaa agaaccaatg 300
tttaatcatt ttgatatgac ctctaattt ggtgatgatt ctgtgttgaa tgacttattg 360
catgtttgct tatttaagca tgtttagca tgtaaatttg atgcaagtaa ggtttattca 420

ccaatgttgg gatggtttaa tgat

444

<210> 8985
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-B3

<400> 8985

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accttttggg agaatccac ttgattggaa tttattagaa tactatatgt gcttcactta 120
tatcttttga gctagatagt ttttgctcta gtgcttcact tatactcttt agagcacggc 180
ggtggtctaa ttttgtagaa attgctagtc tctcactctt cacttatatt attttgacag 240
tctcttagaa cagcatgcta tttgctatgg ttataaaatt ggtgctagaa tggtaggcat 300
ccaagtggg tataataaaa actatcatag gaagtgaatt ggatgctatg atcaatttga 360
tacttgataa ttgttctgag atatggaggt agtgatatta aagtcatgct agttgggtga 420
ttatgaattt aaagaatg 438

<210> 8986
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-B4

<400> 8986

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tggctataag tgtttttttt tactcctctc caactctttc ctctactcc ctccgttcca 120
taatataaga atgtttttga caatggtgta gtgccaaaaa cgctcttatg ggacacatgg 180
agtactagta tttattgcat tttccaagga gtgacctctt ccaatgaaat ggtgtggcta 240
agtttgctta atttaattag ctatagactc aaaattgtct tttcacctag gtacacgcgc 300
ttagcactgt ttcttcttg ggtcaccaaa ctagtctctc tcttcttgat taacttgcca 360
cgtcagactt tatgcctatg tggcaagctt aagcacctgt aggagcaagt aaaaataagt 420
acaatagtgc gctttacatg gcatttttgc ata 453

<210> 8987
 <211> 377
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-B6

<400> 8987

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tggcacactt tttgagaagc aaacggattc tgtaaactgt gaaacacggt ttgcgtcgag 120
gcttccagca aacgaaatat tgtcgaaaat tgaagcagca gcaggacca tgggcttcaa 180
tgtacagaag cgcaactaca agctcaagtt gcaaggagag aatcctggaa ggaaaggcca 240
gctggcaatt gcaacagagg tttttgaagt gacacctca ctctacatgg tggagctccg 300
caagtccaat ggcgataccc tcgaattcca caagttttta ccatagtatc tcgaatggcc 360
tgaaggacgt catgtgg 377
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<210> 8988
 <211> 450
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-B8

<400> 8988

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gattcaaac agggccgtgg ctcatgccgt cattcccgtc ctgatccgtg gctcgtttag 120
acctcagtag ccgagtaa at ggagggatgg gttgctgggc agagttctct cctacctccg 180
gctcctggtt ttttctatta tcgagtgagg ctagatgggc ggcggagctt ctattcgaag 240
gaaacaaagg ctagcgcaga agatggaatt tctgatgcaa tcgattaaaa gaaccaccgt 300
gctggaggac gttaacgatg gcaacgtact catggagcca ctacactgcc agtggtcgca 360
accgttgtag acccgctgcc gcccatggcg gcagtgaagt cggaaggcca gatctgtgcg 420
gctgatggca tgggtcgatac tgaaatcgat 450
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<210> 8989
 <211> 389

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-057-Q1-E1-B9

 <400> 8989

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 ttctgttttt cgtgtgttgt ttgcttattt tgatgcattt atggctagta ccggtaggta 120
 tgaaccatag agaaggtgga atacagtagg tttaacacca atataaataa agaatgagtt 180
 cattacagta ccttatgtgg tggtttttct ttcttgcaact aacggagctt atgagatttc 240
 ctgttgagtt ttgtgttggg aagttttcaa gttttgggta aagatttgat ggactataga 300
 ataaggagtg gaaagagcct aagcttgggg atgcccattg caccccaaga tattcaagga 360
 taaccaaag cctaagcttg gggaatgcc 389

<210> 8990
 <211> 448
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-057-Q1-E1-C1

 <400> 8990

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 gtttgatttt taagcacact cgtctatgta cagaccaatc ttgaagaaaa taatggcaca 180
 aacatatgta ggtcattcaa aatcaattgt catgccctgg ctaggaatta ttagcacaaa 240
 cactaatcct agtcggatta ctagcagaaa tcatttgac agatgaaaca actaatcact 300
 tatcacctgt accattcaaa caatcaatac actacacgga tctaacaaaa cttactcaga 360
 tttcatggat tgggagaaca taaccatagg atttctattc caaaaaaggg aagtacgagt 420
 aaccacggaa accccatgat ctatttga 448

<210> 8991
 <211> 252
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations

<223> Clone ID: LIB104-057-Q1-E1-C10

<400> 8991

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acaaccttca tctttagtagac gttgttgggc ctacaagtgc acaggtttgt aggacagtaa 120
caaatttccc tcaagtggat gacctaaggt ttatcaatcc gtgggaggcg tatgatgaag 180
atggtctctc tcaagcaacc ctgcaaccaa ataacaaaga gtctcttgtg tncccaacac 240
atccaatagc at 252

<210> 8992

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-C11

<400> 8992

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ccactcgacg cggtcgaacc gcctgcgtgg aaagggtgag acgcgggcgg taatggccgg 120
cgcatcatta cgacttctga ttttccatat ttttcatagg gaacagggga gctttggacc 180
ttgtgtctag actacaatct aaccatcaat agccagcagc ttcattccgg taacttgaa 240
ggtactcctg gaccatgac catcccttgg gaaaacgttt gccgaatcaa aatgtggctc 300
ctctgatttg cggcaattag aggccacctc aaggtagtga accttctgct gggttgggtg 360
aactacaaa ggccaacgga acaacaattg cacataccct ttattttcct ggtacaggca 420
atctccagac atgac 435

<210> 8993

<211> 267

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-C12

<400> 8993

catatatcaa tctttacctc cgaaccattc cggagatcct cgttatgtcc gtgatcacat 60
ccgggactcc gaacaacatt tggtagacaa catacataac tcatataata ttatatcgct 120

aacgaacgtt aagcgtgctg accctacggg ttccagaact atgtatacat gaccgagaca 180
cctcccaata gcggaacctg gatgcccaca ttggtccca catattctat gaagatcttt 240
attggtcgaa ccttatgaca acatatg 267

<210> 8994
<211> 451
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-057-Q1-E1-C2

<400> 8994

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atgtccaatg gctacatcnc gtgctctgtc attgagtaaa tgcactattc acgtgccatc 120
gaggagaaaa aatattgctg agtactaggt gccatcgaag tgcacgactc acttacgcat 180
tgcatatccc cattttcttg gcatgacacg ccaccttgat gctagatgtc ccgctgtca 240
tggtggcata tagtatgatt ttgtaaaatc gaggcataa gatgtcccgc gtgtcggcaa 300
aaggatgaac aaagctcatg tcttaaacga aagagtggaa gaacatagat tcccgacggc 360
cgagaaagag caagaaacct cggggtggag cctctgcact cataatattt tatattattc 420
agcgatataa aatcaaccaa atctctccac g 451

<210> 8995
<211> 277
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-C3

<400> 8995

agtcgtgata gagttagaag ttgtaaatat gcattgttgt atcgcgacgt gaatgaaata 60
aatgaaataa tgctcttggt caaaaatatt ataaattaga atgtgaggta gtattaatgt 120
aaagtataaa actgaaaaaa taactgtagt tcagccgatt taaaggatgt aagggtattt 180
acctttgcat gccacgtaat aactcttcta aagtgtcatc taatttcagt tcatgggcgt 240
tctttttaca gggtattaac tgggaaaccc ctggctt 277

<210> 8996
 <211> 256
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-057-Q1-E1-C6

 <400> 8996

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 tcttaaagta ttagatgtta gagagtcttc acatagttgc ataattattc gaaactcatt 120
 gatgctcact tatatctggt cggagtatctt agttatctgc tccactgcgt gacttacaac 180
 tttctagctc acggtggcgg ttttattttg aatgatctac atatctcgcg tgattaactt 240
 atgatattgt gagagt 256

<210> 8997
 <211> 78
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-057-Q1-E1-C7

 <400> 8997

 taggcttatg agtcgcgagg tcttgtgtgc aatggcagaa gccgccgtgg accgctccaa 60
 tgggcagctc caagtgtt 78

<210> 8998
 <211> 434
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB104-057-Q1-E1-D1

 <400> 8998

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 aaaacccgcc ttggacggcc caatggggca cccaagggg ttgcaaggaa ccgattttgt 120
 actgatcagc ttctcaagta aatagcagaa agatcaccct cccttaagag cctcagcctt 180
 gactattgca atgtcaccaa cgaagcattc actgagctga taatcaagct tcctctgctc 240
 gaagaacttc tcatttcctt atgtccattt gttgatgggt acgcatatga ggtcaccagc 300

agagcatgtg cgcagctgaa gcgtctcatg ttgccgcaag ggtcgtatgg gggataaga 360
gatggggcac ttggnatcga gatgatgcac gagctgcgat accttactct cgtcaatagt 420
aatatcacga caga 434

<210> 8999
<211> 418
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-057-Q1-E1-D10
<400> 8999

tggaaaatca aagcagaagt caaaaaggat ggtagagagt gacagtgaaa ctggaaatgc 60
gagtgatggc agctctgagg atgccagaag aaagcggcaa cgccatggaa ggaaatctaa 120
ggccacatct caaatctctg ctgaagatca cacagcagta gctgctctga aggatgccac 180
ttcaactcag gaaaagattg gaacaccaag gagtctggca caagaagaca aatctccact 240
ggagaatggc gagatgcgca caaatgggtg tactgactcc aaatctgaaa ggaaggccgg 300
tatcatgcct gttctaactg gcaaccgaag caaatctagg agccagagca cgagtgctaa 360
tcaactccatg agcaagagca tgagtgtgaag tcccagaagc ccaatcaaaa ggtcaaac 418

<210> 9000
<211> 425
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-057-Q1-E1-D11
<400> 9000

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ttctgtagaa ttgtatgaat agccagacaa tgacattgct tcataatcac gtcgctgatg 180
ttgtgtgctc ggacgaacct ttaatgtgac tgctaattct tccccaaact tgtagcagaa 240
gaacatcagt ggtgggagct gcaacttaat gaacattaca tcaagcatga acttgtctgt 300
aatgtcaacg acccccatgc cagtttctgt cgatatagag aacgtgcaa tgtctgaaaa 360
tggttgtagt tgcactcatg cactgcaaag catatgtaag tggcagaaat gatgaattag 420

taact 425

<210> 9001
<211> 433
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-057-Q1-E1-D12

<400> 9001

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gaggaggtaa tgttaattgg tttgcttggg aagtgcctat attaattggg agtcaaagtt 120
aaccggcatt tagtaaagca atgtttagg actgggaaat tttctttgat ctaatgtgct 180
aaagccagtt cgggtttgtg ctaaactttt gattattctt tcagtgaat gctgaacttt 240
tgatggtaaa tgtttttaa ttgggtcaagc acataagaag gcaaactcaa gtaatgctat 300
ttgattattt tgtgaaactt tgcagctagg ccaactggcc aagccataga caaagaagtg 360
caagtatatc aggagatcta ngangacata cctctcgact ttcttcagca caattaccca 420
cgagagagaa aaa 433

<210> 9002
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-D2

<400> 9002

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ttgagggcat ctttctgaag cccagcatgg ttacccttgg tgctgagcac aaggagaagg 120
cttctccaga agccattgag aagaacaccc tcacaatgct gaggaggaga gtaccacctg 180
ctgtccctgg aatcatgttc ctttctggcg ggcagtccga actggaggcg acgatgaacc 240
tgaacgcgat gaaccagtcc gccaacccgt ggcacgtgtc cttctcgtag gcccgggccc 300
tccagaactc ggtgctgaag acatggcagg ggcagcccga gaacatcgag gcggcgcaga 360
agggccctgct ggtccgcgcc aaggccaact cgttggcgca gctcggcagc tacacgggag 420
agggcgagag c 431

<210> 9003
 <211> 454
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-057-Q1-E1-D3

 <400> 9003

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gggtccacga cattgtcata ctggggagcg tatttctaca caatatgttc ccctttgaga   60
ggttcatggg agtcctaaag aaatatgtcc ttaaccacgc taggccagaa ggaagcatct  120
ccatgggcca tcaaacagag gatgttatcg ggttttgtgt tgacttcatt cctggcctta  180
acaagattgg tctcccaaaa tcgcggtatg aggggagact gactggaaaa ggcactcttg  240
gaagagactc aataatatgc agggactgat attctcggtc tcaagcacac tacatagtcc  300
tacagaactc taccttgggtg accccgtatg tcaatgaaca caagaacagt ctgcgctcca  360
aacacccgga gcaatgcgac gactggatta catgtgaaca catcaggact ttcagcagtt  420
ggttggaaac acgtctcaga ggtgacaaca ctgt                                     454
  
```

<210> 9004
 <211> 405
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB104-057-Q1-E1-D4

 <400> 9004

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gcaccaactt caaacaattt caaattccgg tccccaaaac gaacaaaaaa ggcgggttttc  120
aagccaacca ataactgtcc ttggccctcc aaaatttgcc caacgggtgt ggtaataatc  180
tttttaagtt gatcctggca ttccctttga gtttacaatg tacactaggg tggctatgca  240
gccactcaat tcactttttg taaccctgta agatagttag caactatggg ttcggttcac  300
ggagtaccga tgagcagccc gccctgtttc ttgagtcggc aataagagtg cacaatggta  360
ctactgatac aatttgggat atatatggcc taagcctcga ttata                                     405
  
```

<210> 9005

<211> 269
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-057-Q1-E1-D6

 <400> 9005

 gacggggaaa cctaagtaca acatcaatat ggctaaccta gacgactagg ttccccatcc 60
 aggttcaagt cctaaacttg acatgggtgc tctcgtagaa ggtgtgtgcg cgtgttgtga 120
 gcgtctgcgt ctgcattgtg tttctaaaga aaaaaaaaaa aaaaaaaaaa aaaagaaaaa 180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaata aaaaaaaaaa aaaataaaat 240
 aaaaaacaaa aaaaaactta aacacaaaa 269

<210> 9006
 <211> 428
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB104-057-Q1-E1-D7

 <400> 9006

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 gtgataaatg atcagagaat caggggcaag tggtatgggt ttgttactta cactcaacat 120
 agggctgctc agcgtgctat cttggagatg gatggcaagc aaataggtaa tcgtgctgtg 180
 agagtaaagtg aagtgcgtac aagaggcaac acccgtgatt ttgggcgtga tggcttccga 240
 cgagatcctg taagagatgg aagggatgta tactgggacc gaagggatan ggagaggagt 300
 tatgatcgcc accgggatag agattcctac catgacaggg atagtgatag acctcgtgac 360
 catgatagag acagatatga tgaacgtggg ggatttgacc atgacatgga ctattccatg 420
 gatcgaga 428

<210> 9007
 <211> 420
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-057-Q1-E1-D8

 <400> 9007

gtgcatcgca tgatggcaga gatcgacacc gacggtgacg gcttcatcga cttcagcgag 60
 ttcattctct tctgcaacgc caaccggggg ctcatgaagg acgtcgccaa ggtcttctga 120
 atcagttcat ttcacctcag ccgtccgttc caggagccga tccatctacg tacggcttcg 180
 tatatcaatt tcatgcaact acctactccg gtcccgatcc agcctcagct tcacctgagg 240
 ccggccctaa atttgtttga tcaattcttt tgctactagt agtaactagt gatgatcact 300
 gttgcatcat ttatttattt attttatata tcatcacaag tttcctgtga ttcttttctt 360
 tctatacctt tttgtcgatc gtcggctcca gctcgatcaa acgatccatg ctgctaattg 420

<210> 9008
 <211> 432
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-057-Q1-E1-E1
 <400> 9008

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 caggaaacaa caagcaacat gtaggtgggc cggcccaggc ggaggactgc ctttgcaag 120
 ccccgccatt ctgccacata ggagatgcc acgagtgtc ctagtcggcg ctttatctgg 180
 cgcccactag cctgcaggaa tgggttgccc catttgcaatt gggtttgtga gtcaacagat 240
 gaccagtcaa ccattgactt ttgaaaaata tgttttttta ttctaaaaca acaaagaaac 300
 tatgatttta aaaatgttca caagcttcaa aaaagtttac gaatttgaaa aaaaagtcca 360
 tcaggtttgg gaaaatttta tcgaattttc aaaaacgtac ttcaattttg aaacaaaagt 420
 tcacaaaacta aa 432

<210> 9009
 <211> 432
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB104-057-Q1-E1-E11
 <400> 9009

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cctactggat tgataccttg gttctcaaaa actgagggaa atacttacgc tactattgct 120
gcatcatcct ttctctttca aggaaaacca acgcaagctc aagatggtgc aagaaggatt 180
tatggcacccg ttgtctggga ggtctttgct caagtcaaga cataccaagt acccatcaca 240
aactcatctc cctcgcatctt acattatttg ccatttgctt ctcgtttctc tgtccccac 300
ttcacccttg cegttttatt cgccctctct ttcccgttcg tctttttggt tgctagtgtt 360
gccatgtgcc ttctatatga ttgcatcttt gcttgctgaa aatctattga aatggattca 420
cttanagtgt tc 432

<210> 9010
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-E2

<400> 9010

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cagatacctt ccagggtgct gtcaaggcaa tgaacgaaag aattctctcg gtccttgatg 120
cgtctggctc tggccgcggt gatcttggga tgttctttgc tatcattgct ccaatctgtt 180
ctggtcctgt ggataggcgc aagcgtgtcg tcttcgatgc actcctttgg cgtcctgcaa 240
gcgaagggtg caggggcccag atcaggagga gtgacgcgct aagttacatt aaacttctcc 300
gtgccgttta cataccaacc catggggcta gcgacatgct tgaaatgcat ggggagtctg 360
accctaccat ggtatcgtae acagagttcc ttgagatggt caatgatcct gattgggggtt 420
ttggaattct aaccacactg gtga 444

<210> 9011
<211> 133
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-E7

<400> 9011

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atccgtccct ttacgttctg tctgtcttgc tggaccata gattgtgtga ccgcatcac 120

gtggcgtgct ggc

133

<210> 9012

<211> 328

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-E8

<400> 9012

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aaacagccac catacctatc tagcatggca tttccatagc cattccaaga tatattgccca 120

tgcaattttc caccgttcca tttattatga cacgcttcat cattgtcata ttgcgtgcat 180

gatcatgtac ttgacattgt atttgtggca aagccaccat tcataattct ttcataacttg 240

tcactcatga gtcattgcat atcccggtag accgtcggag gcattcatat agagtcatat 300

cttgttctag tatcgagttg taatattg 328

<210> 9013

<211> 437

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-057-Q1-E1-F1

<400> 9013

atcaattgac tagaagctag acccatggag gcaataagcg caaccatcac ccggtttttg 60

aaattggtaa acaaaacggg cttgcggcca acaaccaagg aactttctcaa gttcttctct 120

aaggcctcaa aggcaaaagg cctcttggac aacaactttg tctcccttat ttgacgaagg 180

tcctcgtcgg ctctctcgac aagttcaacg tcatcaagaa gctcccgaac gaccttgacg 240

tacgcctcta gcccatgcgc ccatgctctg tgatgcctgc caccctcaac ggctctctatg 300

gtgacaacct ctctgacgca ctggtggccc tgcgattgcc cgtcgtcgcg ccggagaatg 360

tcaacctcga ngtcgcgctc aacgcgcagc gcctggcgca gcaagacaca atcgacataa 420

tcacccacat ctacgcg 437

<210> 9014

<211> 425

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-057-Q1-E1-F10

 <400> 9014

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 tttgaagtgt attgtgacgc atcccggaag gtcctcggat gcgtattaat gcaagaaggc 120
 aaagtagtcg catacgcttc cagccaacta cgaaagcatg aagaaaatta tctactgat 180
 gacttggagt tggcagcagt cattcatgca ctcaaagagt ggaggaactt tttgctcgga 240
 aattggtgtg aaatatatac ggaccataaa agcctcaa atattttcac ataaccagaa 300
 ctcaatttac gacaatggcg ctagttggaa ttagtgaaag attatgatgt tgacattcac 360
 taccatccag gaaaggcgaa ttagtggca gatgcttta gtcgaaaccc cagctcgggc 420
 aacga 425

<210> 9015
 <211> 425
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-057-Q1-E1-F11

 <400> 9015

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 gacgactccg acgaccactc cagcgacgac tccgacgacg acggataact agttagtcat 120
 ctatacccat ttatgtgtca aatagatcat agggtttttc tggttactcc tgccctcccc 180
 tttttgggat ataaatccta tggttatggt ctctaatacc atgaaatctg agtaagtttc 240
 gctagatccg ttagtgatat tgactgtttg aatggatatag gtgataagtg attagttggt 300
 tcatctgtgc aaatcatttc tgctagtaat ccgactaggg ttagtgttcg tgctaataat 360
 tctagccag ggcttgacaa ttgattttca atgacctaca tatgtttgtg ccattatttt 420
 cttca 425

<210> 9016
 <211> 379
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-F12

<400> 9016

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caatcctgct aagccaggca ggtggatcga tgtaaatacg ctccgatggt gctcagcagc 120
tggatctgtg gaaaataaat ggtctggact tcgattatat tgaggaagac aggttaaaga 180
tatacgagtt gcttgcgtgt aacatacaag gcgctttact tgattcacca atcgactgga 240
aaaggtagct tggtttaaat atgtggatc agttgtcacc agatacatca cttgatatta 300
tcattcggtg ttatcaccaa ctacttgggt agggcaaagt tccaaatcct gttcctgtat 360
acatcgatga aggacctct 379

<210> 9017

<211> 272

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-F2

<400> 9017

tgggagaaaag caaacccaaa gacgtcgctc tgatgacgat cctccattgt agaatacctt 60
cctggtttct ttttccctgt atgtatgatg ttgatgatgt aaaggctgat tggtttgcag 120
ccaatttttg gcatgccaat tggtggcaag cctatttttg gcaaagctgg aagttgccaa 180
catttggtat gtttggctat caattggttg gttgccagtt tttcgccaat atttagcaaa 240
aaaaacatgt gtctatcaat tggtttgtta cc 272

<210> 9018

<211> 458

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-F4

<400> 9018

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gccatcgatc gtgtcgtcac tcccggccgt aacacggcga ggaacgactc cggcgaccgg 120
tcatttgcaa gtttccgctc gctcgtaccg ccgacgtgca ggggacaggg aggactcatg 180

aagctgaagg gtttggatta gtgttcacgc tactactcca caatgagctt ccccatgaga 240
agccaatgat ccctattgaa gcatctaaac gatttttgtc tagctatgcg aaatcattac 300
tcatgatcag tcagtgcccg tatggagata tcatcaaggg gaagctacaa aaatatattg 360
gaagaggtag tattgcatac tccctccttc catctatata gggcctaata catttttcga 420
agctaatttt gaccaaattg tagagcaata atatatga 458

<210> 9019
<211> 445
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-057-Q1-E1-G1

<400> 9019

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cacagtatca ctaatccaac ggatcgtggg acgtgcatcg cttgaacata agtcaatatc 180
tacttcgtat caggggtcaaa ggtacaatat cgattcaacg ctgtaaagat ccgacactca 240
catatcacat tttcctatct aaataaacct tttcagttgt gcatgccaaa gttacagtga 300
tgttttctca aacaaccaat gtagctatca tgcacatgca ccactgttac tcttgcattc 360
aaattcatta gtcttggatg atttaagttt ctattttgaa gtaatatatg taatattcat 420
atatgaattc aacgggtatg caatt 445

<210> 9020
<211> 385
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-057-Q1-E1-G10

<400> 9020

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gttggagttg aggtcggcgg agcctcaggg gggccacgag acagggggcg cgcccagggg 120
ggtaggtgcg cccccaccct cgtggactgg gtgtgggccc cctattattg attatttcgc 180

cagtattttt atattttcca aaaagtgcct ccgtggattt tcaggtcatt ccgagaactt 240
 ttgttttcta cacataaaac aacatcatgg cagttctgct gaaaacagcg tcagtccggg 300
 ttagtttcat tcaaatcatg ctagttagag tccaaaacaa gggcaaaagt gtttggaaaa 360
 gtagatacct tggagatggt tcact 385

<210> 9021
 <211> 358
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-057-Q1-E1-G12
 <400> 9021

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 gctatcctca gtgctagatg atgagatttg gtagtagatg ttgtgtttgt gtgttaaggg 180
 ggccctttta gacttgtgga ctcatggttt gagaagttgt ttagtagtgt attagcagag 240
 aggaagcaga gaatgctacc agctgttcca atgcttttct cttgctaacc acctgtgtaa 300
 gaacttggtt tcattcgcta atctgatgac tgcccagcca ttggctcttg gttaaaaa 358

<210> 9022
 <211> 344
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-057-Q1-E1-G2
 <400> 9022

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 gagtcccggc tccacaagtc cggggattca agaggaaagt gaacccgacg cactaccggg 120
 agccaaggtt ttacaccaag gtgtttaagg aatgccactc ctatgaccaa gatgggaatt 180
 cctttgagct ttctctggta acttccaagt gcattggagc ttatgtgaag agcaagaaga 240
 accagaacca gatatgttgg ctatgggaga aggtcaagtg cacagaagac aaaggctttc 300
 agagattcct ggacaatgtg cagtacaaat ccactggaat cctg 344

<210> 9023

<211> 158
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-057-Q1-E1-G3

 <400> 9023

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 caacccaaaa attgcgggtt ttggccaatt caattgttcc ggataattaa aagggtcaaag 120
 ggattcaaaa tggaataaaa tcttcggtaa cttaat 158

<210> 9024
 <211> 55
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-057-Q1-E1-G4

 <400> 9024

 ggggtccacgg cgaagggaga ttggatggat ccagcgctcg gtgacacagg acagt 55

<210> 9025
 <211> 149
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-057-Q1-E1-G8

 <400> 9025

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 acatagcatg gcttgcgc atgaatccatcc acggtcaccc ttcgtgcca ttccccctca 120
 aatgatacgg gatcgactg gagatgtgt 149

<210> 9026
 <211> 448
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB104-057-Q1-E1-H1

 <400> 9026

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angagcgaac tgctagcgtg tgaacggcgg ggtagtggct ttccattatc ccatgatacg 120
ggcttccgaa agcccttgga tctgagatcg aacggttgca tcgcgtgatt ctagacctat 180
gggtgaatat cctatcctgg ggggttattc tgcaaatttt caacaactta gcatgcgacc 240
gtttgatctc agatccaagg gctgccagca gcccgatatca tggtcgcgcc taccacgacc 300
gtcgcgtcgc tcgcgcgggc gcgcccttgg agatttaaca cggtcgcgta ggctatctaa 360
tgttggcatg tcatacatag tcatcactta gtcactcata ctacaacaag gttagctata 420
acgttggcta aaagtgtgtt tatttttt 448

<210> 9027
<211> 391
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-057-Q1-E1-H11
<400> 9027

cagattagtc attacgactc tgcctctttt gcgatacctg accattgcaa ccaaaactat 60
gcgcatattg tccatgccag cgaatttatc gccagactga ccgttgccctc tacagcaaatt 120
aatgataggc atgaatcttt acataattgc gatcccgatc atttgactgc cctatccctt 180
gctgaacatg atgctctcta ctcttggtggc catgatgcca atatttttga acaccaattt 240
gctatacttc cttatgttac acatgagatc attgctattg cactcatact tgacagttcc 300
ttcgacgagg atcatgactg caatgatttt accataaatt cccttgatgt caattgtgcc 360
tataatatgc aaaaccttaa ccttggggat g 391

<210> 9028
<211> 331
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-057-Q1-E1-H2
<400> 9028

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agaccacta ctgcagcctc ctaattgaac ttcagccagt gtgtatcaca tattaatcgt 120
acatgggaac ttctgccact gtgtcacaaa tccatcgccc attcgaactt cggottacct 180

cacaacgacg atgacgagct catgtacatt tttcacagaa gaggtcgagt aacaaatggt 240
catatatata ccgtgggatt gggagtcgaa aatggttgga cgctgtcggg cacgtatctt 300
cttctctggg tctgctgggt cccttgactg c 331

<210> 9029
<211> 410
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-057-Q1-E1-H5
<400> 9029

ttcgccggtc gacgggagga tcgactacag cgagttcgtg gcgatgatga ggaaaggggc 60
ccccgagggg gccaaaccca agaagcggcg cgacgtcgtg ctatagggga cggcggcttg 120
gtcgaggaag ccggcgggtc atccgcaaca gaacagcaag cgatcgagcg tgcgtgcgag 180
gcagctcgcg acgacgacga tgacgagctc atgtacattt ttcacagaag aggtcgagta 240
gcaaattgtt atatatatac cgtgggattg ggagtcgaaa atggttggtac gctgtcgggc 300
acgtatcttc ttctctgggt ctgctggttc ccttgactgc caggggaatt agtttagtat 360
gtactgtata catcagttga gtaagttgga caaaaaaaaa cagaccaaaa 410

<210> 9030
<211> 205
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-057-Q1-E1-H7
<400> 9030

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ctagtgcagc ctctaaatt tacttctgcc attgatgtat catatattaa tcgtaattgg 120
gaacttttgc cactgtgtat cagatccatg gccattcct acttctcctt gcctcaccat 180
ctctatgccc gcttatttcc atttt 205

<210> 9031
<211> 356
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-A2

<400> 9031

ggctctagaaa tcccggggccg acgggggagct aaatccggta catgggggtcg ctcaccacgc 60
cgccctgcac ggagaagggtg atgtggaaca ttctgggcaa gggcagggag ctgagccagg 120
agcagttaca actcatcacc gcgctgctgc ctcaccagga caataggccg ccgcatccgc 180
tcaatggccg ccaagtcgcc ttctacaagc cgccaaacac catcatctcc atccaatccc 240
tagtactccc tocctaaacg attatgaaag cttacatttg ttacagagg gagtacaata 300
agcaggacat agtacatact ccctcctcgg ttccacagta taagaacgtt tttgac 356

<210> 9032

<211> 221

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-A3

<400> 9032

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ccagccgagc cacgaggaga agcaggagta cgcgtccaac gagcacaacc agaaggcgct 120
ggccgagatc tacctcctca gctactgcga caagatcgcc atgagcgcct ggccacctt 180
cgggtacgtc gcctacggct tcgccggcgt caagccgtgg a 221

<210> 9033

<211> 398

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-A5

<400> 9033

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aaagtaagaa aataatacaa gtatctatgt aaacatacaa gttagaatat ttttcctttc 120
agaaagaaga taaaacaaga ggctcaccac ggggtggtgcc ggcgatgagc tcggcgcggg 180
tgatcgacgg cggtgaagac ggggatgggg tgtgacggac cactaaacct agacaaatat 240
tatggaaaat ggagcttggg ggtcaagctt ggaaaggaga aagcttaagt agtgtggctc 300

gggcattcca tcgaacacgt tgtgtgcata ggaggtgagc tagagcacca ccaagccctc 360
 tcccccttgg cgagagaaaa acagagcact ggggtgct 398

<210> 9034
 <211> 332
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-058-Q1-E1-C7
 <400> 9034

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 ccatctgtat atataacaaa gtgtacataa ctgccggttc agggatgggc aattgcacag 120
 ctctagtaga tcaaaacaca cacacaacct accacatcat cccaaccac caccctccac 180
 accccccacc ccaaagtgtc accaacgccc caccacacc caaaccttca ccacccaca 240
 cccaacaaaa caaaaaacgc ggcccccaa aaggttccaa ccttaattcc ccgttgcagg 300
 aaacttcaaa ccccccaaa acagtcccc aa 332

<210> 9035
 <211> 273
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-058-Q1-E1-D3
 <400> 9035

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 accactggat gtggttttga gggatttttg cagtgggggtt tgtaagggtc tatgccgcgc 120
 tgggtttggg atttgaaata aaacgaagg agatgtgcca cgctcttaaa tgccaaaaaa 180
 aaaataaaaa aaagccaaat caaaaatcaa tacaaggaat ttaacaactt atctatgcaa 240
 atttacccc cgcaattcaa tcaatctaaa tct 273

<210> 9036
 <211> 357
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-058-Q1-E1-E10

<400> 9036

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aagttcacgc gacctatata agacacaatc catgggatgt gagcatccgg tgatagattg 120
ctcatgagag agtcatgctt gagacttggg gtcttgatat actggagagc attgcatgca 180
ttgcttgatga gttttatttg aagggtatat ttaaagctgt actgatggat ctccttggtg 240
agccacctat tgtacagtgc catgtctatg acaagctatg catcacaggc aatctagtca 300
aaatgctgtc gattctatct gacgtttggt actgaatgaa tacctgatac aaacggg 357

<210> 9037

<211> 237

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-E2

<400> 9037

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agtaaagtaa taatattaag aactagatca tctaacccca ttgaatgaaa aaatgaaatt 120
cgattttcaa ggaaattttt gaataagaga taaataaaca attgaattga aaaaaaaaaa 180
cttctttcca ttttggaaaa tttccttttc aataagaccc tctttttgga gtgaacg 237

<210> 9038

<211> 241

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-E9

<400> 9038

gacgggggat gacagataat atcgatatag gttattctac aagattactc tatagatcca 60
tcagctctaa gtaaactgcg tataaatcat gtatgtagaa ggtatgtggt actgatgtta 120
gaaattgatt ccttggtgtga ggggtgcggat gtaacacaac atgtaattct taatatccac 180
atgcctcacc aaaacaatgt acggctaacc cacaattatg acgttatcaa gctcattaca 240

a 241

<210> 9039
 <211> 439
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-058-Q1-E1-F4

 <400> 9039

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tgtgcaaaga tgtgcagaga aggtctcagg cgggtgggtt cattgacttt ggccgcttta  120
ccaatcatcg ctcttttgag accggttcaa agccgattga ctacatccag agatttcaca  180
atggtgattt agcgaaatgt gaaactacgt ttgaagagat gggccgtact gcacaggcca  240
acattatgtg tggacgatgc tcaaataaag tatgcaaaga tgaacatgga tgcatttgcg  300
gcgtatccta tgatgaaagg atgtgcagga cggttgttga gctagccatt ccttgctcta  360
aaagaggtcc aagagttttt acgggtttca ctctgtgggt tcacccccgg tcagcacaag  420
tggtttacaa tggattgac                                     439
  
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<210> 9040
 <211> 419
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-058-Q1-E1-G1

 <400> 9040

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gcatgttgcc caatcttggg aaagaatgaa attgatgctt cgcaattgcc ctactcatgg  120
tttgaattta tggatgatca tacaaaatgt ttatgcccggt ttgaactttg cttctagaaa  180
tctcttagat ttggccgccc ggggcacggt tatggaaatc actttaggag atgctataaa  240
acttcttgat aatattatgg ctaattattc tcaatggcat accgaaagat cttctagtaa  300
aaaagtgcag gctatagaag aaatcaatgt tttagtgga aagatggatg aacttatgaa  360
attgtttgct actaaaaaca ctctttttga tcctaagat atgcctttgg cctccttga   419
  
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<210> 9041
 <211> 356
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-G4

<400> 9041

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atgacgtaag acaattgcag cattttgaac gacaaccttg gttaaacatt cgcaagtgtt 180
acaaacaggc agttagcgca cgaatgtcta aggaattacg caaccctaatt cgcaacttca 240
atgtgatctg caaccgcaca atcattccaa ttggtcagct aggtaagctc agtatcaggt 300
tcatgcttgt agcctcgaat acttcgcaac ccagctcatt ctgtccaacc attcac 356

<210> 9042

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-G8

<400> 9042

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gactacgagg aggagctcga gaaccacctc cgcgtccacc accacgagca cccaggcggt 120
ggcgagggtt atggggacga tgatctcgag gctgatggcg agggcgaggg tgagggtgag 180
ggcgaggatg aaggcgagga tgacggttct gaagagagcg agtacgagga ggaggggttt 240
gatgaggacg aggaggtgga ggatgtggat ctagaccccg cagagtacga ggacgacgag 300
gcttatgcac gggcgcttca ggacgctgag gagcgtgagg ttgccgcgcg gcttatggct 360
ctcgctggga tcagcgattg gcgggcccgtg gaacatgttg aggattacat acacgacgcc 420
caggattcat ggcaaga 437

<210> 9043

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-058-Q1-E1-H10

<400> 9043

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ccaacatgaa ggagtcggag atatctcagc tcatgcaggc tgccgatatt gacaacagtg 120
gtaccataga ctatggagag ttcatagctg cactctaca cttgaacaaa gttgataggg 180
aagaccatct atatgccgcc ttccaatact ttgacaagga tggtagtgga tacatcacgg 240
ctgacgagct ccaacaggca tgcgacgagt ttgggattga ggatgttcga cttgaggaca 300
tgataggcga agtagatcag gataatgatg gacgcataga ttacaatgag tttgtggcca 360
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gtcttaggga tgccttgaac ataaa 445

<210> 9044
<211> 441
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-058-Q1-E1-H3
<400> 9044

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ggccagccca tcggacgcta cgacgacatg tgggcgggct ggtgcgtcaa ggtgatctgc 180
gaccaccttg ggctgggct caagacgggg ctgccctaca tctggcacag caaggccagc 240
aaccggttcg tgaacctgaa gaaggagtac aagggtcatct tctggcagga ggacatcatc 300
cccttcttcc aggcgcgcaa gctgaccaag gaatgcgaca ccgtgcagaa gtgctacatc 360
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gccgacgcca tggtcacctg g 441

<210> 9045
<211> 374
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-058-Q1-E1-H4
<400> 9045

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accccccaacc ttgacgcca ggtcagtaga aggtacatctt gattgctggg gtggatggaa 120

gagtgacaat aactacaggt tgggtcaaagg ttgaaagaaa ttctccttta aattaggcca 180
atgctactca acttttcttt gagtgacgag gaatttcaac cgtccttggc gaaggactgc 240
tatctgattg tcactagcct cgtgtgtaaa tgcttcgctt tcaatatttt gtactatctt 300
gctgccctat gtgctactta agcctgatct attaaacatt acttggccta ttcctttgtg 360
ccgagcttga tgtg 374

<210> 9046
<211> 373
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-059-Q1-E1-A1
<400> 9046

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ttgggggtcaa gagtggcgct gatggtgaag gtaccaccag taccgtcctc cttggcgaa 120
accttcttgg tctcaggtgg agctgccatt gccttcttac gcttgccggt tgagctcgat 180
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gagctcttgc cggacttgggt catgttcttc cccccgggag cttcagcggc aagtgtcctg 300
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atgtcgccag gaa 373

<210> 9047
<211> 402
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-059-Q1-E1-A10
<400> 9047

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aagtatgtct agaggggggt gattagacta ctcgacccaa taaaaatcta gccttttccc 180
aattttaagt cttggcagat tttaacaact tagcacaagt caagtaatca acctacacat 240
gcaattctaa gagtatagca gtggaatgta aaacaattgc atatgaaggt aaaggaggga 300

gtttggaggg agaaaacgca atgtagacac ggagattttt ggcgtgggtc tgataggtgg 360
 tgctatcgta catccacatt gatggagact tcaaccacg aa 402

<210> 9048
 <211> 433
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-059-Q1-E1-A2
 <400> 9048

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 ggtgcttctc tggcgccgcc atcatcgcca agcgcagggg gtacctgtac ctcggcggcc 180
 tgctctctc tggcctgccg atcctgctct ggcctgcagt tggcacgtcc atctttggcc 240
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 tgggtgtacga cacgcaggag atcatcgaga gggcgcacca cggtgacatg gactacatca 360
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 tgctcaagaa cgc 433

<210> 9049
 <211> 424
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-059-Q1-E1-A3
 <400> 9049

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 ggcgcagtct tctatggaag cagagtacat tgctgcgaat gaagctgtaa aagatggcgt 120
 ttggttgagg aacttcctgg tttctctcga gatagttgaa aatgcgtctg atccggtcac 180
 ttttattgtg ataattaagc tgcgattaat ctttccaagg attccaagtt tcatagcagg 240
 gctagacata ttgagggaaa gtaccattat attagagatg taataaatag gctgaaaact 300
 gttcggcttg catTTTTGCC TGGTAATGAT ATGTTGGCAG ATCCACTGAC TAAACCTCTT 360
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tttt

424

<210> 9050
<211> 454
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-059-Q1-E1-A4

<400> 9050

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tttcctttgc tcattcttct ctttatctct tcaatctcct tgtctgtctt ctgagcttct 120
ctgatccttt ccatcaagggt ggactgaatc tccaatgtcg ctagatagcc tcttgggact 180
atctccaaac atagctcgcg aaggctctcg gctaactcct aaggtatctc tcctgtcatg 240
ggggtgctgc catggatctc ttgctgcagt tccatgcgta ngatgaaggg ttcattgaatc 300
acgagtagca taggaacaaa gtgatgagca ccggccgagg cacctttggg catcttggtc 360
ttcaaacaga ttgcacagcc agagcaaaca acattccaca ccgangcagc tangatgaac 420
acagtantag tcgagcataa atatatgaat acag 454

<210> 9051
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-A5

<400> 9051

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ggaaggagca ggagcttgag aaggagcagg agaccagca gccaggactc accggcagac 120
ccccgctcgc caacggcagg tctggaatgt tgccaatgtc gagccctcca gcaaatccgg 180
gacagcttac cattttttat ggtgggtcag tatgtgtgta tgactcagtg ccaccagaga 240
aggctcaagc aatcatgtct attgcagcag cagcagctgc ggcctcaaaa agcaatggca 300
ccgctgctgt taagcctcca gcgatgtctg cgaccaatgc tatccaagcc atgcttacgc 360
ggtcgctctc actccagagc acttctgtag caaatggaca acctcaggct gt 412

<210> 9052
 <211> 415
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
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<400> 9052

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 taaatctatt ggtgctaata ttggtgttgg tgcgaatgga ggcgctggtg ctggtgttgg 180
 tgctggcctt ggagcaaacg taggtattgg atcaaagtga ggtgccaatg ctggtcttgg 240
 tagcgggtgct ggtgctggtg ctggtgctgg tgcgaatggg ggcgctaaca ttggagttgg 300
 cattggagca aatgtagggtg ccaatgccag tcttggtgtc ggtgcacata aaggtattgg 360
 tgctggtgct ggtcttggtat cagatgtang tattggagca catgttggtg ccaat 415

<210> 9053
 <211> 386
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-A7

<400> 9053

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 cacgaactgg gcgtggacga gtgcacggca atgatctgca gatttgacct cgacggcgac 180
 ggtgccctct cgttcgatga gttccaggtc atgatgatgg cctgatcatc gaccctcttc 240
 gtggcatttt tctagactga tatgattttc cacttaatgc atcgatcgat cacatgtatt 300
 tgtacgtgtt cattctttcg ttgatttgct cgcacgatca tcttcgattt ttgtgaacac 360
 gtgtacagat tcatttggtg tcacac 386

<210> 9054
 <211> 415
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-A8

<400> 9054

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atcacaaagc aggtatacat ttggattatc aagtaacaat gtgggtttac tcatactctt 120
ggacaagtgc cctcggattc agaaaactct catgagaaga aagtaaagcc tgtctgaaga 180
agctgctgct gcctaagtta aataacatag ccgttggttg ggaagtctgc atcaaatcac 240
attttcttat tcaaggggtg ggaggagatg gtgttgTTTT aattctttag ttgttgatga 300
tttctctttg gccccaggag gggatgggga tccttgTgcc atgatccaga aattgtcaat 360
gtgggttttg ggggggttgct tttgcttata ttttctcacc agcaaaggct atatg 415

<210> 9055

<211> 397

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-B1

<400> 9055

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cgactgagga gaggccacac cctgtgctgt tagagagctc cgttatccag cttgacgagg 120
agctggacgc aggggtctcc aagtgaagtg gttgtaatca tggtagctac tagttgtttt 180
tttgtcttga tctatctggg tctaagattc taaaatacat tcgcccatac atcagtacta 240
gataggggtg tggttgcca cgcattgccc agccaacggt aagccatcgg atatgataat 300
cggttcaata tatagctgaa ttagatatTT tattgttgTg ttgggagctg tcttgagcac 360
atagttagaa atcatgtttg tagttgctga aagaaaa 397

<210> 9056

<211> 295

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-B10

<400> 9056

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cttctactcg ctggtcaaga ccaattccat cccgctgctc aggagcaatg cctgcagctg 120
 cgtcatccag ggcttcaaga tcttgcccta cgtgggggtac tcgcccagag ccggcaggca 180
 ccacgcccac gcctttcttc tcctgctga cggctccgcc ttcgactga atgtcacctg 240
 gagtgttctc ctctacgac agcctagtcg cgtcaaagtc cttgggagag tctgc 295

<210> 9057
 <211> 386
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-B11

<400> 9057

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 tcagattatg atgaccatca ttgatgacct tgtgtctgtt gacactctga ttgaagacca 180
 tctctgcgtc gagccagcca acgagtacat ccagagctgt gacattgttg ccttcaacaa 240
 aatctaaatc ttcctgaggc aagtgatggc ggtcgggtgga caatgcagca gcacaaacaa 300
 tatacttaca gttttccgtt gccgtagcta aagcagcata acatattctg ccctgtgagg 360
 tttttggacc ttaggttgag ttgggt 386

<210> 9058
 <211> 405
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-B12

<400> 9058

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 aactgcatct gttgtgaact gcctgctacc tgtggtggta acctagaatg ctatctatat 180
 atgtgtggcc ttaactttat tgggtgtgaa tgcttcttc atgttttagtt gttgtttcat 240
 ggtgcaatga acacaaatgg cgcttcggtg ttgcttcaga catgctgcaa cacttgtcta 300
 tgatgtgggc aagtggaaca tgctgtgcc atgtgccaat tacaccaaat attgaatgtg 360

gcaatgttcc aaaatggctg tcatgaatta tagtacatgg ggttt

405

<210> 9059

<211> 422

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-059-Q1-E1-B3

<400> 9059

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gtttatctcc aaggtgaact gcctgcctac tctctctggc tctcatcacc tagctagcag 120
ttaatagtag tccctctgtc ccaaaataag tgtcttaact ttatactagc tctagtacaa 180
atattgtccaa agctcaagac acttatattat ggacggatgg agtagtatat attcggttgg 240
tacttataac actggactgg agcttttctt gatgcattgc atgcttgcca aaatttccag 300
gggaggggag acttgtagag ctccaagtgg agtgtctgcg gaagtcattt gagtggcgtg 360
aggagcaatg gctgcctcta gatgcangaa aagatgttgc ggccaagata acccttgacc 420
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<210> 9060

<211> 403

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-059-Q1-E1-B4

<400> 9060

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agtgacaggc gcgagaatcg aggagcccaa aagttagata tatggcagag ctgtcgcttc 120
gattgtcgga ggctcattaa ggaaggtag ctatatgcaa tttttaataa caggtgacgt 180
catggcgggt tatcatgatt ctggaagatg acattatggc ggtttacaag aattctgtga 240
agatgatgat gcgtttaaga ttgacatgaa ccagttcaga tcaatctggg gcctaattgt 300
ggggatatta ctactgggca taaaccggcc aggagaggcc gggttatccc cacaatgggt 360
tactgtnact gaagcccatg aagacagacg gtggtgcttt atg 403

<210> 9061
 <211> 377
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-059-Q1-E1-B5

 <400> 9061

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 atccaactta ataagaccat catggattcc aaccgagtta tttgtgatat ccagaatata 180
 acccgacaca aagagttatt tgtgatagaa gtacatgcat ttgcaaaaaa tagataatgc 240
 attactctta tattctactc cttttgtaaa ctaataaag acttttttaga tcactaaagt 300
 agtgatctaa aaagtctcta ttagtttaca gagggagtag tatgctatct ccatattttt 360
 gagattctta aattatc 377

<210> 9062
 <211> 478
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB104-059-Q1-E1-B6

 <400> 9062

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 cggcaacagc taccgatggg caccggcggc ggagcgtgtg gtgggtgttc cgcgcacacc 120
 caatggggac gccacacgca ctacactacg cctgggactg cgccgccgcc gcggtgtagc 180
 caccagctg gagttgtctt ctgatgatgg cggagtggct gagcgacaac gacggaccag 240
 tgccattggc gattgtggga gaagcagacg agataaggta cagggagggg ggggaaaatg 300
 cgacacagga ctgcgccgtc gtgaggggtt ttatagcagg tcggtaagca ttgggatttt 360
 gggggatttc actgagtcag ggagaagctt gcgcgggaaa ctgcgaggtt gcgcgggaat 420
 gagctcancg acgattcatt tggcacaccg tttggcaaaa tgaacgcccc cgcgcgct 478

<210> 9063

<211> 426
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-059-Q1-E1-B7

 <400> 9063

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 ggcaacagct accgatgggc accggcggcg ggccgtgtgg tgggtgttcc gcgcacaccc 120
 actggggacg ccacacgcac tagactacgc ctgggactgc gcctccgccg cgggtgtagcc 180
 acccagctgg agttgtcttc ggatgatggc tgagtggctg agcgacaacg acggaccagt 240
 gccattggcg attgtgggag aagcatacga gataaggtac atggagggat gggaaaatgc 300
 gacataggac tcgccggtcg tgagggtttt tagagcaggt cggtaagcat tgggattttg 360
 ggggatttca ctgagtcagg gacaagcttg cgcggaacc tgcgacgttg cgcggaatg 420
 agtca 426

<210> 9064
 <211> 467
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-059-Q1-E1-B8

 <400> 9064

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 agacacaatg caaaaacaaa atatgaattg gttttcaata gtacttagag tagtgatttg 180
 cttcattata ctaacggatc ttaccgagtt tttgttgaa gttttgtgtg gatgaagtgt 240
 tcgataatcg agaattgtctt gatgtgagaa gaaggaagag aggcaagagc tcaagcttgg 300
 ggatgcccg ggcaccccaa gtaaattatc aaggagactc aagcgtctaa gcttggggat 360
 gcctcggaag gcatccctc tttcttcaac aagtatcggg atgttttcgg attcgtttcg 420
 ttcattgat atgtgcaatc ttggagcgtc ttttgcattt agttttc 467

<210> 9065
 <211> 405
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB104-059-Q1-E1-C10

<400> 9065

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gaaggcaaaa tccctggaaa atcttctaga gaccaacca tacaccatcg ggaagaggac  120
tacagttgca acgtgagtga actacagctt ttgaaagaga aaaaggaaca ctatgacgct  180
aagaatttgt gtatcaattg gtttattcaa atttggtgag aggggtaaat gggaatagca  240
gtagcgtttt gagtatcgag atacaaaaat ggtctgattg attgttgtaa agttgcaaag  300
gctattttca cttgttatta cttgctcggt gtctagagca attaactgtg ctcgttgaac  360
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<210> 9066

<211> 211

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB104-059-Q1-E1-C11

<400> 9066

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atagaccatc ccatacacca tcgggaagac gactacattt gcaccgtcag tgaactaccg  120
cttttgagag aacgaaggca cactatgacg ctaagaattt gtgtggcaat tggttttattc  180
aaatttggtg agaggggtaa ctgggaatag g                    211
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<210> 9067

<211> 400

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB104-059-Q1-E1-C12

<400> 9067

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gggggcaaca gacacccttt cgaggttggt ggcggtagct ggtccctcca atcggcccaa  120
agttactagg ccctggcaga tcttcttctt tgtttgggtt caagtccgag tctctccact  180
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ggcattccgg ataagaatga atgtcaaata aggattagag ttagaaacaa accatgaagt 240
 tgacatcaac ggggaaacat aaatttagac gagtaaagta catagactag tactccctcc 300
 ataaagaatt ataagagcat ttggatcact aaaatagtga tctaaacgct cttatattag 360
 tttatacaga ggtagtaaata gtataccgga tgcaagcatg 400

<210> 9068
 <211> 425
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-059-Q1-E1-C2
 <400> 9068

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 tgaaaactgc gtaccatttg caatggatgc aactaatag ggcacatgca aatatgatgg 120
 agagtgcagg tcccacgtat ggtggttcag cgcctttggc agtgtggaat acactttgga 180
 aagtgcagg cccacgtaga attcagattt ttgggtggag ggttctgcga ggaatcggtc 240
 cgctaaaagc aatcctgaca aacagacaca ttggttctaa tggggcgtgc ccgatatgcc 300
 atcaagggtgc tgaggatatt aggcattttt tatttctatg tgtgcatgca aaggaagtgt 360
 ggaggcgtct tgggatgttg caactggtgg aagatgttgt tctagtggat tcgggctcga 420
 ttata 425

<210> 9069
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB104-059-Q1-E1-C5
 <400> 9069

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 taccctccaa aagccgtgcg caagctagca gcagtggcag cgctgtgcgt gcagtacgaa 180
 tccgacttca gaccgaacat gacgatcgtt gtgaaggcga ttcagccctt tctcaaccaa 240
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aaagaagctt gaatgaactc ttgcatgggt ccatgtgtta tatctataga tcatctactt 360
gatttgttta ggtcatgggc tgaccacctg tggcgggtgct aggttcaaaa ccttgtcatg 420
tcaaaatttt ctgaacgaan atcgtgt 447

<210> 9070

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-C6

<400> 9070

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taccctccaa aagccgtcgc caagctagca gcagtggcag cgctgtgcgt gcagtacgaa 180
tccgacttca gaccgaacat gacgatcgtt gtgaaggcga ttcagcccct tctcaaccaa 240
aaaccggctg gaccagccgc cgaagcaccg aaaccctgat cgatcagcgc taggcggcac 300
aaagaagctt gaatgaactc ttgcatgggt ccatgtgtta tatctataga tcatctactt 360
gatttgttta ggtcatgggc tgaccacctg tggcgggtgct aggttc 406

<210> 9071

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-C7

<400> 9071

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aagcgcata ctgctgagtt tgatgcgagc atgctggaga tccgcaagaa tttggatgct 120
atggatgaaa ttgagaggcg gagtgcggag gactatgaga agttccgtaa gaagctaaac 180
aatattgaga aagcatgcaa tggtgctttg atcgtgctgg tgcctagcac tggtctgctt 240
tttatgtcac tgtagtatca tctctattag ttgggtataa gaaaccctta tttaactagt 300
gggttaagaa accctacctt cagaactcta tgtgtttag tgatccagct ttggactttg 360
cattgcatct taatgaacgc ataatggtga gc 392

<210> 9072
 <211> 222
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-C8

<400> 9072

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 aactccaaaa gtactaaaac ttcagggaga attattttgg aatatataaa aaatattggg 180
 cgaagaaagc accagagggg gggcactagc catccacaag gg 222

<210> 9073
 <211> 349
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-C9

<400> 9073

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 gctaaggaat agatcacgtg gatcaacttg tgtgtctttg ggggtgcctct accttagtat 180
 ataaaggagc caagggggga gggggcgccg gccaggagga gagggcgtag gaggagtcct 240
 actccttccg ggagtagcac tcacccccaa tcctattcca actaggattc cccaaacggg 300
 gaaagagga gaagggtggc cggccacctc tcctactcc taataagac 349

<210> 9074
 <211> 390
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-D10

<400> 9074

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cctgtccctg ccgtcgcgga gcatacagaac ctgaaccggc acgagatcga gatcgagggg 180
aagaagatca acgacaccga caagaggaac aacggaggag tcggagccgc gcaggtaccg 240
acaagcaacg ggcagacaac gccgccgacg gccacgttcg acctgggtgt aaaaaagcc 300
agaagacgct gtgagggagc tgaacgagca gccgcaccgg gagttcacga cggacgagac 360
cgacagcgac gacatgggcg atgactacac 390

<210> 9075
<211> 363
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-059-Q1-E1-D11
<400> 9075

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atcagaacgc tgaaccggca cgagatcgag atcgagggga agaagatcaa cgacaccgac 180
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cga 363

<210> 9076
<211> 449
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-059-Q1-E1-D7
<400> 9076

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gaacttggcg agtgccggac ggccaaggat tccattataa ggtaatggaa agtcggcaac 180
gtcaaacgtg accctctcag tcttgaagtt cagctcactg ccaaagtgtta ccggcaacgt 240
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gagctcgctg tcaggggtct ggagcttctg gagcaccgcg gaggagatca ggttcaagcc 360
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<210> 9077
 <211> 459
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB104-059-Q1-E1-D8
 <400> 9077

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 gctgttactg tcttgacaac tggattctgg ccaacctaca aaacttttga cataaacctt 180
 ccctctgaga tgggtgaaatg tgtacagggt ttttaaggagt tctacgcaac aagaacaaag 240
 cacaggaagc ttacctggat atactccttg gggacctgca atatcagtgc aaaatttgat 300
 gctaaaacta tacagctcac tgttacaaca tatcaggctg cactgctgtt gttattcaat 360
 ggatctacta agcttagtta ctctgagaat gtaacacagc tgaacctgtc agatgatgat 420
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<210> 9078
 <211> 437
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB104-059-Q1-E1-E1
 <400> 9078

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 aagtctgaat ctgcaatcca gtgcgaacca atcgcatcga tccgatccga tccgatcgga 180
 acggccggac caaccaatca atcaatgccg ctgatgctgc gtgcaaggaa catccaggtt 240
 agtctagcac cactgctgac agaaagatag tactccaatg ggtgtgcgtg cactccaccg 300

cgtgcgccag atagatagat agatagatag atcaatcaat tatcgtggat tcaatcatca 360
 cccatgcgtg tcgctcacna gacataacgt ctgcattatc agttgttgtt gatagcacta 420
 ataactcccc tgccaag 437

<210> 9079
 <211> 396
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-059-Q1-E1-E10
 <400> 9079

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 cttcgtggtc cggttcccgg acgccatgcc gctggacaag ggcgcgcccc tgctgtgcgc 120
 cggcatacacc atgtacaccc ccatgaagta ccacgggctg aacgctcccg ggatgcacct 180
 cggcgtgctg ggccctggcg ggctcggta cgtcgccgtc aagttcggca aggccttcgg 240
 gatgaagggtg acggtgatca gctcatcgcc ggggaagaag caggaggccc tcgagaggct 300
 aggcgcccgcac ggcttcgttg tcagcaagaa cgccgacgag atgaaggctg cgatgagcac 360
 catggatggc atcataaaca cggtgtctgc aaacat 396

<210> 9080
 <211> 389
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-059-Q1-E1-E11
 <400> 9080

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 ggagaatcca agaacgtcgt ctaagcttgt tagctcaaat tgaagacgta cgccgaacta 120
 gggcgataca gcgttcgagt cgaaagaagc atggtggccc atttggtcaa gaccttgtaa 180
 ctgtggcagt cgtcggatat acaaatgctg gaaaatctac tctagtgaat gcactttctg 240
 gagctggtct atacagtgat gatagattat ttgcaacagt agatcctcga ttacgcagtg 300
 tgattcttcc atcagggaga aaaatacttc tcagcgatac cgttggcttc atatcagatt 360
 tgctgtaca gctagtggaa gcatttcat 389

<210> 9081
 <211> 410
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-E12

<400> 9081

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 gggtgacatt gtagataact tccgtcttca ggagcagact gcttttgttt ggaagcattt 180
 tagctctcac ataatcact acaacagtaa cactctgcg aaacattcta gggataacat 240
 agaatgtttt caagaccaat gttcagggtc gcgatacacg taaacatcta tacacagcct 300
 cacgagacac ttcaatacat tgttggttaa attaagcatt aagatgacag ggatttctcc 360
 gactactgtc aggaaggatc agctgattga acattcctgt actttgcaca 410

<210> 9082
 <211> 470
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-E2

<400> 9082

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 ttttgcgagc ttgtaaagtg cattttacct cagccatcga cccttggcat gtcaaatac 120
 cagggtcgtg gcgttattat atacaaaaca atgattggca tgtcactcaa gttctagtga 180
 atataattta tatcatgtat tcacttttct ctaaaaaaac tgtattttgc tcctttagtt 240
 atttcacacg ccgtgccagg ggctcgatat gggaacaaac taaattgcca ataagtctga 300
 acagctttat agcatacttc ggcgtcgcga ctttggcctt atatgcatca gctccgaatc 360
 atgtcttggc tcaatagttt ggtttcccggt ctctgtgct tgctacctta cgttccgctc 420
 tatccgctaa ggtagtaaag ggagaactac tgcgattgtg ccctggttta 470

<210> 9083
 <211> 427

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-059-Q1-E1-E5
 <400> 9083

ggggggtgag aggacgacct gtcctctgcg ttggctgtcg aagaagagtg ctacgagcaa 60
 gttctgcaca ctcaggatcg ccttgaaggt ctagctgcat ttgcagagaa aagaagacct 120
 ttgtacacag gaaagtgagg ccgtactgaa gtcagccctg ttagcctctt atgtcttctc 180
 tgctgatacc ctgaagaatg tgccttgggt ccaaagaaaa aaaaaacctg aagaatgtgt 240
 ctgggttgct agattatttg cagatgtatg tgctacatct tctgattgtc atgatcgct 300
 aaaactgaat gaaccgcacc catgtaactg taaggatga aagctgcac tggagatgct 360
 gcgggttggt ttcgtcaaaa aaaaaacaac ttgggtgtga atacaactaa taacccccct 420
 gccaca 427

<210> 9084
 <211> 442
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-059-Q1-E1-E6
 <400> 9084

gggcattata ggaagttccc aaacaaaatg gtaaagttta tactcccctc caccaacaag 60
 catcaatcca tggcttgctc gaaacaacga gtgcctccaa ctaacaagag tcccaggggg 120
 agttttgttt gcaattattt tgatttagtt tgcataaagc atgggactgg gcatccctat 180
 gaccaaccac tttctcgtga gtgaggagcg gagtccactc ctcttgagaa taaccgcct 240
 aacatggaag atacgaacaa ccctagttga tacatgagct attcgagcat acaaacagg 300
 atatttattt gaagatttag agtttggcac atacaaattt acttgggaacg gcaggtagat 360
 accgtatata ggtagatatg gtggactcat atggaataac tttgggggtt atgggattgg 420
 atgcacaagc agtattcccc ct 442

<210> 9085
 <211> 422
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-E7

<400> 9085

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ccatctagct ctaggggttag aacgcaactt atgatctcga ggtagatcaa gcttgtactc 120
gatacacaat catcaatata atcaaagcaa gacgtagggt attacctctt cgagagggcc 180
cggacctggg taaatactgt ctcccttctc ccctgttacc cataaatctg agatacacag 240
ttcgggagccc cctaccccgga ggtctgccgg tttttactac cgacacctac aatgtcgtcg 300
gcgccgacgt agaagcactg agctttcgtc cggtagctcc tccctcatac attgttgtgg 360
aaacttgacc atcgagccca ctccaaggag gccaccgcc gccatgatga atttgggcct 420
tc 422

<210> 9086

<211> 463

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-E8

<400> 9086

gggcatgtaa gagagacatg atttacagaa ccagggtgttg gtacacctgc tagtgtataa 60
gaacaacgaa tgtgaagttt tcctctgcgg catttggtta gaggcaccga ggtaaaactta 120
tttttgattg aatcatgatg agaaatatat tcacgcgagt caccccaatt ttgtttaaaa 180
tcgtatcaat aaggagatat ttaacacaac acaatcataa cttgcacgcg atgtacgcct 240
tgtgaattaa tcatgttctt accaatgcct catgtctaaa ttttttgttc catgagggca 300
ttcatgtaga cccatccttg tttttctcgt gacaatatct tcaaagctag acccattttt 360
cgggtgtctcc tttgtacctt tatgttggat ctttttcacg tgctaaagcc aagtggactc 420
gcccccgctc ggtagcggca cacacctaga acgaacaacg cgc 463

<210> 9087

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-E9

<400> 9087

cccggtctga cggggtagca actgggggatg ctgttcctga aaccagatct gttgcaaaag 60
gtgtactgga tgttatatca ggtgacttgc caaaaagcat caaattgcag aataaacatc 120
ttgctgcact aatcgaattg cacaacatga ctggcacttt tgctcggaac attcagcact 180
tattttcaga atcagatctt ggagttgtgc tgagtacatt gaaagctatt tattccccat 240
atgaaacctt taagatgagg tatgggcaga tggagcgcgc tgtgctttct gctgcaatgg 300
ccggtataga tatccgtgga gccatctccc gtggtttagg tgcacaaggt atagagctaa 360
gtgaaactgt ccgtaggatg gaggaatcca tcccac 396

<210> 9088

<211> 335

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-F1

<400> 9088

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cctcgatgat gatctgtttt ggctgaaga acaactctac tgcatggttc cttgtaatac 120
atgtcaagtc aaaggacgtc ttcggatgat tttgctgagg atgaaaccta gtttttgttc 180
aactgtaa atcttctggaa gcaatttggg agcgacattt ccttgattca gatgattttg 240
tacatttttt catgtgaacg ttaagaaggt gtttgtttcc agggacttat tggtttaggg 300
acttaaaaaa gtccctataa gtccaccta aacca 335

<210> 9089

<211> 386

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-F10

<400> 9089

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agaggagaat ggactggatg tagttgttgt caatccaggg actgttttgg gcccgatgat 120
tccgccaagg atcaatgcta gcatgggcat gtttcttcgc ttacttgaag gctgcactga 180

ggagtataag gattttcttca ttggggccagt ccacgtggaa gacgtcgcat tagcccatat 240
cacgtgttc gaaaaccogt cggcgctccgg gaggcacctc tgcgtggagc ccatctgtca 300
ctggagcgat ttcgctgca aagtcgccga gctctaccct gactacaagg tcccaaaatt 360
ccccgaggac acgcagccgg ggctgg 386

<210> 9090
<211> 399
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-059-Q1-E1-F11
<400> 9090

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catttagtgt ttgtgccaag tagaacctat aggataacct atgatatgag ttgatttgat 120
tctgctgaaa aacagaaact ttgcgtcac gagaaacaaa ttgataaatc acagaaacga 180
gattttgcat tgattctttt tgcttatgtt caataaacia attgtttagg acgtcctatt 240
ttggtaggat ttttaaagtt ccataagttt gcgttagtta catattgcta cagactgttc 300
tgtttttgac agattctgtt tttcgtgtgt tgtttgctta ttttgatgca tctatggcta 360
gtatgtatgg gtatgaacca tagagaactt ggaatacag 399

<210> 9091
<211> 389
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-059-Q1-E1-F12
<400> 9091

tcgaccgggg catagcaaaa aagttggagg gaccatcttg tgaagaaaga agagaagtag 60
aagggccaaa gagcaaagca gcagatctga tcgaggggaa caaaatccct agaatgcctc 120
tattcccaaa ggggcctggc acatctctcc atctcatctc ttccccgcct cttctccac 180
ctccggccgc tgccgcagcc aggccatcgt ggtggtgccc caccagaca acctccttc 240
tccaacacca tcatgcctc cagctaccac gccatcagca cctgccgctg caccattaac 300
cgtgccacca gctccaccgc gccaccgcat caccggtggg ccaccaacca gcgcacctcc 360

ctcacctgc tgctcatctt cttctcccc

389

<210> 9092
<211> 339
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-F3

<400> 9092

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caaggaaaac aagttgagtc agtatgcaaa aaaaatcggg ccgcccacaaa gattcaaacc 120
taacttagcc gttaagtcaa ggccaaagcc ctccaaacag gccccacaaa tcgactccaa 180
ggccattctt ttaaaaagtt cataacggga aaaacctggg ttaaacacaaa ttaaaccccc 240
ttgcacacaaa tccccttttc ccaaccgggc ttaaaaccaa aaaggcccca accaatgccc 300
cttccacaaa tttccccacc ctaaatgcc aatggaacc 339

<210> 9093
<211> 310
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-F4

<400> 9093

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gttccgccga cgctcatcaa gggccgctgc catgtttcca acctggatat ccggaacttc 120
ctggtcggca tctatttttac cgtgaagggc actatcaatg aagggtccat attctgaaac 180
cttcccggcc agaaaaaccc ttgtttctcc cagccgtggt tgtttcacc tgtttccatc 240
ttgcccaccc tcggcgctct cctgaatttt gccactttcc cataccctga attttttatt 300
cggctttcaa 310

<210> 9094
<211> 438
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-059-Q1-E1-F5

<400> 9094

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atatgtattg catcaataat ctgctagtta ctgggtgtgtt gatgttggct cctcggagcc 180
atttggtgga cgacattgac acccaaaaaat ttgaggagtt ttatgatttt cttgacaaat 240
gggtggcaga tcagcctcaa tctagcagga caagtgggtt cccctcaaag gagaagccag 300
gcaggggagaa agcaaagagg aacaaaagta agaagagtgg cgccattcga aaggcgtaca 360
tggtttcatg atggagggtg ctcaggtttt gccgttgctg gtgtgtttgg cangagtgtc 420
attgtgttgt gcaagtgt 438

<210> 9095

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-F6

<400> 9095

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atcgagctcg tctcccgtc cgccgccctc atcaaccaga aatgccatgt caagaacaag 120
gatatcagga agttcttggga cggcatctac gtcagcgaca agggcgccat caaggaggag 180
tagagagccg gaaaccgtcc cgcccaccag aagccgtgtt tctgcctgcc gtgtttgttt 240
catcgtgttt gtgtctgtct gtcgtcgtcg tcttcgtgat tttgaacttt ctctagactg 300
aattttgtag cggaggtaaa tttttaggga tgtgccgtgg aacatgctat ctttattgtt 360
atcctgcata tcgtcgccgc cgcgagaaac ggtgcgacgc ttatctagcc ctaaaggctg 420
aagacatgga 430

<210> 9096

<211> 474

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-F7

<400> 9096

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cacgctgcca cagccgaccc gagggccggt cagccctcgg aactctcggg gccggcatgg 180
gtgaccgggc agccaatgac ggccccggag ctggaatgga tgatggagtg catgatgggg 240
tgctggacga cggatgatgg ttgcgtattc ggggtgcgtgg ccaagcccc cgccgacatg 300
ccgctctgct ggttcgccta cgaccagacc tacgttatgg gcatggtaa atgcgccttc 360
acgcctcac cgccagcacc ggcgccaccc aagccgcatg ccccgccgc ccggccatga 420
cacgtaacg atcgagacct ctacctagtc gccgacaatc accatgcatg catc 474

<210> 9097

<211> 467

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-F8

<400> 9097

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tgagcttcgt catggctgcc ctcatgggtg tcatggctgc cacccttctc tactcatgcy 180
acgcccgcaa agtgaaggat aagcccaccg ctttccccgt ggccggggaag tgcttctcga 240
ggtttttcgc gaactgcacc gagccgcggt gcaagaagtt ctgctgccag ccactccccg 300
gagccgtctg tatcgacaaa aaccattggt gctgccctat tgcttagtta taagcgccgc 360
tgaagcagtc aggctaagaa atactagtta aaggtggcaa taagtaatat tcgtacactt 420
ccaaatatat actaccctg tttctaaata taaggctttt ttgcagt 467

<210> 9098

<211> 311

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-F9

<400> 9098

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 ttctttcttca ttggtggatt tccatcgtgt ctatgagcac aggccttctgg attttgatat 180
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 ttctttgaat c 311

<210> 9099
 <211> 105
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB104-059-Q1-E1-G1
 <400> 9099

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<210> 9100
 <211> 371
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-059-Q1-E1-G10
 <400> 9100

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 tggattggat cagattaact ggaggaccgc ctcatattgcc ggtgaaaggc aattattctc 180
 cttctgatgt gatgatgagc agttgatggc gactcaaaag accgcgtaat ctctgtagaa 240
 attcggaaaag atatggctga gacgaaaagc agcgaggatt acctacctat ctatccattg 300
 catgatgttg caaatccaat gtagtagtaa aatatgttct tcagttccac tgttaccaa 360
 tgactaatta a 371

<210> 9101
 <211> 398

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-059-Q1-E1-G11
 <400> 9101
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 cttcgtggtc cggttcccgg acgccatgcc gctggacaag ggcgcgcccc tgctgtgctc 120
 cggcatcacc gtgtacaccc ccatgaagta ccacgggctg aacgctcccc ggatgcacct 180
 cggcgtgctg ggcttgggcg ggctcgggtc cgtcgccgtc aagttcggca aggccttcgg 240
 gatgaagggtg acggtgatca gctcatcgcc ggggaagaag caggaggccc tcgagaggct 300
 aggcgcgcgac ggcttcgttg tcagcaagaa cgccgacgag atgaaggctg cgatgagcac 360
 catggatggc atcataaaca cgggtgtctgc aaacatcc 398

<210> 9102
 <211> 391
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-059-Q1-E1-G12
 <400> 9102
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 ccaattgatc gttctatagc actcttactt tttcatcagc catcagacca agtggttgga 180
 gctgttgaca atcctcgcca ctaaaatctc ataacgagaa ccacaaggcc tatgctaaaa 240
 actaggttgg ttaatgttgc gaaaattact ggagatggct cgtggaaatt caaggatcgc 300
 ctttattcat atgtaatcat catctccgtg aatgcaggag caattgtgaa tgtttatccg 360
 atatggtatg gtatgcaccg ttttaatcgt t 391

<210> 9103
 <211> 249
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-059-Q1-E1-G2
 <400> 9103

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ctcatgttcc atatggcatc tgccataatt catgggtgtc tcttggtcag ctgcctetca 120
agttcgtcat cacgggtata tgttgctcct gggatgtgag atcttgcatt atttactgat 180
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catatattt 249

<210> 9104
<211> 153
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-059-Q1-E1-G3
<400> 9104

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cttgggttct accttatttg cttttaatat gac 153

<210> 9105
<211> 487
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB104-059-Q1-E1-G4
<400> 9105

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gttgcaggaa cgtagagata agtatttccc tcagttagag aaccaaggta tcaatccagt 180
aggagacaac acacaaatca ccgaatacct gcacaaacaa tcacacaact tgcacccaac 240
gcgatatagg ggttgtcaat cccttcacgg ttacttgcaa aagtgagatc tgatagagat 300
aggtaaacga taagggtacat attttttggtt ttgttggttt atagatcgga aagtaaaata 360
ttgcaaaata gtagattgga aactaatatg atggaaaatt gacctgggag ccataggttt 420
cactagaggc ttctctcaag atagaanata atacggtgag tgaatgaaat actgtcgaga 480

aattgat

487

<210> 9106

<211> 359

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-G5

<400> 9106

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tcgcaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaaaaggg ggcccccaaa aggttttaaac ttttaatttcc 300
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<210> 9107

<211> 471

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-G7

<400> 9107

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ccaatgcaaa accttattat tttttactat aacaaatcac tagaattatt attcaacatt 180
taatactaaa ttcctctgca tatttaatac tcctatcctc aaatagaatc attaaacaag 240
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gaatgcaaga gtaacaatac ttccctgact ccaaaattat gaaataaaat tcccactgta 360
ataaatttat cagatcttaa tatgcaaaaa gattcaacat tataccattt cttacttttc 420
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<210> 9108

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-G8

<400> 9108

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aggteggtgt tctatactca gtgatgccgt tggagttgat ggactcactt atgttgcaag 180
ccttccactg ttatcgttat tagatggcct taagccatat ttattgtaat aagttctctt 240
ttgagacact cgatgtaata agtgtgtgat tgctactctg ttataaatcc ttcaagtact 300
gtgtggtgtc agcattttctg atccagggat gacaccagag cacagagatt ggaccgtttg 360
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<210> 9109

<211> 287

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-G9

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gcaacaagac tttctgcccg ctgtgacgaa ttgtccagac cagttgcata aatacatttc 120
atggcacgag acaggtggat tgtgcgttta ttttcataaa tatatagacc tgtacgtctg 180
aaagtgttgt tgacatttca tggcgttttt tggggcaaata acatttcatg tttgtatttg 240
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<210> 9110

<211> 172

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-H1

<400> 9110

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taacaatatc ctccttggat atctatccct ttcgacctag tttcaaagt tgctttaaat 120

aatcccatgc atttatatgt tatgaccttg agcatcatag gtctttctct ca

172

<210> 9111
<211> 199
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-H10

<400> 9111

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ttaagtgtct ttttaagttt gtttttgacc tcgccgttgt agatgggtccc ttttggttca 120

aaggaaaaca aaaaaaaaaa aaataagatt aacaaaaaaaaa gaaacaaaaa atagaaaaaa 180

aaaactggac atcaaaaag 199

<210> 9112
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-H11

<400> 9112

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gaggcgacgc cgacgccggg cagctggcag aggggagcct acgctgggtg tctgaagatc 180

acgtggtgcg gagcccgatc atcgcggacg ccagggttgt cccgacatga ttctgtcagg 240

cgttcgttgt actcagccag cctgggttagc ataagcacia gtatccatac agttcacaac 300

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gcaatcacac aaatagggca cttatcaaag gaagtcactg 400

<210> 9113
<211> 371
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-H4

<400> 9113

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 ccaccgtcta gaggtcgccg aggtggagga cgacgccacc atccggagtt cgtcaagggtg 180
 gaggacctcg acgcttttga catacatcta gggaagtggc ctggttaggt tgggtggtgaa 240
 acgctagga aggtaccaac cttttgttga tggttgtgtg tgtcctcggg atctcttcga 300
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<210> 9114
 <211> 446
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-059-Q1-E1-H5
 <400> 9114

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 agcttacgag ttttctgttg agttttgtgt tgtgaagttt tcaagttttg ggtaaagatt 180
 cgatggacta tggaatgagg agtggcaaga gtctaagctt ggggatgccc aaggcacccc 240
 atggtaatat ttaaggacaa ccaagagcct aagcttgggg atgccccgga tggcatcccc 300
 tctttcgtct tcgtctatcg gtaactttac ttggagctat atttttattc accacatgat 360
 atgtgttttg cttggagtgt taatttaatt ttattttgct ttggttgctg tttgaataaa 420
 atcccaagat ctgaaattcc taaatg 446

<210> 9115
 <211> 378
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-059-Q1-E1-H6
 <400> 9115

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gctcaagacc aaggaatgca tactgaaggc tgccaatgat acccttcaag aaaggcccta 180
acagataaat ggaagcatct attgggtggt actctcactg cttagcaaag agaatgaagg 240
gtcaacattt acggtcatgc tgcccacgct tcggaaaaaa ggcaaaaatg ttttacggct 300
caagcatggg aagtatagac caaagaatgt ggtttacagt ttccctattt tgttggatta 360
gctaattgtg tgatttgt 378

<210> 9116
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-H7

<400> 9116

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tgggccccac aggcctcccc tctcgcaatt ccttggtctc caagttgtct tttgggcaaa 180
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aaaaaacaag caaaaaacaa caactggcac ttggcactat gtcaataggt tagtcccaaa 300
aactgatata aagttgttat aaaatgaata taaaacatcc cagaatgata atataacagc 360
atggaacaat aaaaaataat agatacgttg gagacgtatc acactgccag aggcattcat 420
atatagtcct aatgttctag atat 444

<210> 9117
<211> 347
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-H8

<400> 9117

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aggccttctt gtctcttagt tttcaggacc taacaatttg tggatcatca ttgttaataa 180
gctcatgggc tgggggtgcc acgaaacaga catccgaggg atgaaaactg gttgagattg 240

tcggtgtgta tattatatta ttgtgttgca tgtataagtg aatctcatca ccaagtagtg 300
gtgatgaaat gtcacctgtg tggctgtgta ctcgaaagtg gaaatgc 347

<210> 9118
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-059-Q1-E1-H9

<400> 9118

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cgactgaaga tatccatgga gaggatagcg ctactcaagg cagccaaacc taagatgccg 120
cccgcgaaaa ccgagcaaga ggaagaggag aggaagcaga gcgaggagt ggacggattt 180
gggaacccca agggcccctc cacgctctcc aagctcacag cggaggaagc cgagcacctg 240
gccctccaag cagccgtgct ccaggagtgg caccagctgt gcaaggagaa agtcatgaag 300
gcacagtgag gcctggtctg cgctccgct gtataatgtt gtacctgcct tttcctcgag 360
ccacattttg atttattttt ttcagccgtc cgacattttg attttt 406

<210> 9119
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-A1

<400> 9119

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agatactaaa gacagttctg agctccgcat tactgctgat gataaaagag aagatttcaa 180
agttcacttg gatctcgctg cttgctctgc ggcgatatct ctttgtttct cggaagaaaa 240
tcaacagtgc agagttgtat catgcatatg tcatactga gaaaactagt ctaatcgctc 300
actggtattt caagatcgta ttacaccaca tagtagaagt acagaatcat aacatcacga 360
tcaacttgag atccccatgg aatgttctga aaaaaattgg tcggttttt 409

<210> 9120

<211> 194
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-A10

<400> 9120

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 ggatccgagt ggggactcta ccagcccga ttcagcctca aagagtggcg gcggttcggtt 180
 cctcaatagg tttta 194

<210> 9121
 <211> 303
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-A11

<400> 9121

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 gcagattcgg cgtgggtgacc atgtgcatcg ggtccggcat gggcgcgccg gccgtgttcg 180
 agcgggggga ctcggtggac gagctctcca acgtgcgcca tatctagtcg cacaatttcc 240
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 agc 303

<210> 9122
 <211> 423
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-A12

<400> 9122

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 gcgacacca aacggtccaa ggtacgtgcg tgcgttctct gcgcgcgcaa cgggctgccc 180

ttggtttatac gcgtgcattg acgccaccaa ctttttgtcc gcagaagaag agctggttct 240
cctgcaccag ctgccgattc tgatgccgta gctgcttgcc gtcggtggtg agagagatcc 300
gataacttcgc cgcgccacga ccagatgcac gtactcggcg ggaggcgacg gtggaacttt 360
tggcgatcgt ggtgcttctg accctgctcg gtcgccgcat ctcacgtgca gaacatcatc 420
cat 423

<210> 9123
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-A2

<400> 9123

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gattctctgg gtatttcta atataacaac aaaatttcat aatacaacca gtgatgattt 120
tccaatcaaa cctatataat tgcaagctaa atgccaatcg tttcattata caatgatcgt 180
tcttgatata ttttaatttt ccataggaca tttcctagta gcaaggattt tcatgtcata 240
ttttggagta atttgattat caacttcgtc tactcgttgc gtatgtgaaa ttattgccct 300
atattagctg tagctagaca cccgctccag ctgcaaaaaa agaagtgtgt gtctatgcat 360
gaaatgtgaa tattgggtag gttctttgaa gcaaaaaaaa aaca 404

<210> 9124
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-A3

<400> 9124

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ggggggcgcg ccctatgggg gggcgtgcc tccaccctcg tggccgcctc gggagcttct 120
tgacttgac tccaagtcct ctggatcacg ttcgttccaa aaatcacgtt taattcctgc 180
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aattctcaat gtaattttct ttattgtggc atgaatgttc agatccaaat gattcaaaat 300

aaaagcttat aagacataaa aatagtaata ctcaaagcat actaacaat aatcatgtcc 360
tatcaaaata acatagccaa agaaagctta tccctacaaa 400

<210> 9125
<211> 350
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-A4

<400> 9125

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acatgaatgc cgtcaaggca cttattgctg cagactactg tgcggtcaag gtttagctcc 180
ccatgaactt ctagatgggt gtatcatata aaatccctga attcatcaag atgaaccccc 240
ctggtaatgt tcctgttctt gatactcttg atgctaattg ttttgagagc agtgctatta 300
catgctatgt tgctcgccca aacgggtgaca acctgtttta ggggtgtctc 350

<210> 9126
<211> 371
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-A5

<400> 9126

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ctcggattca taagactctc atgagaagaa agtaaagcct gtctgaagaa gctgctgctg 180
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caaggggttg gaggagatgg tggtgtttta attcttttagt tggtgatgat ttctctttgg 300
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<210> 9127
<211> 399
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-A7

<400> 9127

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tgcgatgcca tggccgactg cgcgagaagg tctcggcgac cggcgagag atcacaagcg  180
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gtcatgcctt cctcactgac acatgggggt cattgggttg tgggcctcag tttttgtag  300
ggaattgtgg gccttagttc gtagctacag aaacgggata aaaacgtcgg caggctaata  360
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<210> 9128

<211> 379

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-A9

<400> 9128

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gccggtctcc agcatgcgtc tgagtacgga ctcgagcagc ccggattccg ccgcgaagag  180
caatggcggc tcgttcctcg atgggttcaa gtccgtggtg cggaggtcac cgagcgcgcc  240
gagctttgcg gactcggaga acggcgccgg ggctccatg tggtcgagct ccaagtggac  300
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<210> 9129

<211> 399

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-B1

<400> 9129

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<210> 9130
 <211> 386
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-B3

<400> 9130

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<210> 9131
 <211> 365
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-B5

<400> 9131

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aagtgttcga taatcgagaa tgtcttgatg tgagaagaag gaagagaggc aagagctcaa 300
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gggga 365

<210> 9132
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<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-060-Q1-E1-B9
<400> 9132

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<210> 9133
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<213> Triticum aestivum
<223> Clone ID: LIB104-060-Q1-E1-C1
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<210> 9134
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 <212> DNA
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 <223> Clone ID: LIB104-060-Q1-E1-C11
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acaaaaaaaaa ataaaaaata 300
 aataaaaaat aaaaaaaaaa aataaaaaat cacaaaaata taattaaaaa ggccgtcatt 360
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<210> 9135
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 <212> DNA
 <213> Triticum aestivum
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<210> 9136
 <211> 388
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-C7

<400> 9136

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acaacatcaa catccaacct cttttgacat ttgcaatccc agttttcaca ttaccatcct  180
ttcccacctc tttttgcttg tgggtgtttc ggagtctgta gctatttagt actttctatg  240
tcgtgggcta ccagaggctc cctagaggct gcaaattttg tcgctgagta gaaccaaggg  300
aaccgactga ggggtgtccc agtttctcct gaggctatat gcgtgtatta actgaaggcc  360
gtggaaggca tacctcgtgg ggagccct                                     388
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<210> 9137

<211> 320

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-C9

<400> 9137

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tgtacgtgag tgttgacgac ggctgctct cgctcgccgt ttcgccgaag tagatcaacg  180
acttattata tgttaagatg ccggatcaga ccgtgtatct tcgcacacac cggacgcaaa  240
acgcaaacat gtgtctcata cctcactcct gcttgggtaa tgtttctttc cgtggcctcg  300
cgatcctccg cagcgttccc                                     320
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<210> 9138

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-D11

<400> 9138

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 aggtttgcct ttaggatgtt tacaatgctt gttggtttgt acggtgcagg acagaaactt 180
 tggctgtagt gcgcaatttt atatttttta ctggaacgtc aaacggttct gattcttttt 240
 gcactgcctt tctgtcaaat tgtttatttt cctaattttt gtagaatttt tggggcacia 300
 aaagtatggg gaatgttcag attgctacag actgttctgt ttttgacaga ttccgttttt 360
 gatgcatagt ttgcttggtt tgatgaaact atcaatttct atcagtggat taagccatgg 420
 aaaa 424

<210> 9139
 <211> 385
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-D2

<400> 9139

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 ggtgctcttc tccaatttgg caagacagga cttatttcgt cgggttggtta cctggctgct 180
 cctgtggaag aatggactgt tggaggaact gcactgactg cgttgatgga tgttgagagg 240
 aggcattgca agaacaagcc agtgatcaag aaggctatgg tggaacttga tgctgcgcca 300
 tttagaagt ttgcctcgct gcgagatgaa tgggccagca agaaccgata catcagccct 360
 ggtcccatcc aattcagcgg gcctg 385

<210> 9140
 <211> 179
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-D3

<400> 9140

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 tccaagtcac cgttcagcgt catgacatgc aatcagctt caatcttgat ctctggacta 120
 aagtcgggtt gtcacggtaa gataaaactg tactatattg attaatgcaa acatcaggg 179

<210> 9141
 <211> 359
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-D5

<400> 9141

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 ctaatccaga tcgcttcgat catgtcgtgt aagatcagct ggcgggccgt cgtgtggtaa 120
 acttgtcagt gggagtcttc agacgtggcc tctggtaagc ctcttgacgc atagccatct 180
 ttcgtcactc ggagatggag cgatgtggtc aggttttata ggacttcac gcagtcacga 240
 aactgactg gagacttagc tgcatatagt ccttgcgac ctggcatagc agttgacgtg 300
 tttgacgtc agcctaaaca gctcacttgc acaacatata acgctgcact gctctcggt 359

<210> 9142
 <211> 393
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-D7

<400> 9142

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 gtaatccggc acgtctgaac gatcgctact ggcattctggt gcgccacgta cggcttatgc 120
 agggagtggg catgtatgtt ccggcatgag tccacgtca cattagtaga atcaaagagc 180
 cacacacact atggccgatt gcattctgta ggaatactgc cacgtcgtgc taacggccgg 240
 agcagttggt tgcaacctga acggatggac tcaactgttg atggagggtta cgaacgtcag 300
 gactctaata atgcatttag caaacaagta gtggctgaag ggcctagtga ataggcgaac 360
 cggcggagca attcatgat atccgtgctt gca 393

<210> 9143
 <211> 400
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-D8

<400> 9143

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ctgaaccccg caaggccaaa tgggcggcca gtcttgattt aacatacgat gccccctaag 180
tgaatcacct catggaccgc caatggtctg gactatggat ccgcagccaa tctattgatg 240
ctgcaaaaat gcatcacaaa catgattaag aagaacacct gtctcactaa catgattcag 300
gtgatgctct tctgccggat tcttcctgc caactccgat cctcccacat gtgggagttc 360
aatctggaat atcctccgac actaaagcac ttcttcggca 400

<210> 9144

<211> 330

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-D9

<400> 9144

tgcacggaga tgatgtttcc atcgtagaat gcttgaaaca tcctgtttat atcactgagg 60
gctcttatac aaacatcatg gtgactactc ctgatgacat gctcttagct gagcgtttga 120
tgaacgataa atagggccaa tattaacaat gtttacttga tttgagaggc acctgtatga 180
atttgtcagt acgacattcc attgcctttc cacagttttg gcctcttggg aactagaaaa 240
gtaaacatgt agctcataca cgagatagat aacctgtatg taacattctt tccgtggcaa 300
tgaatatatg gcaaggtttt ctgtttgaaa 330

<210> 9145

<211> 386

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-E1

<400> 9145

cgacgccaaag aaaggccact atcaatgtat catcagtatc aatcactaca tgacaccaca 60
caacagatat gctgctgtca gcagtcctct ctaaataagac actgcaatta tcgtataagt 120
acatcattgc tgctgtcagc agtgctctct aaatagacac tgcaattatc atgtacatca 180

ttgctgctgc aatgaaccat taagaattat ttaaaatcta gcctaccatc tgcgttgctg 240
tcaacagagg gttgaggcgg agttacaaaa tctgtatgag aaaccgaggg attgtccgag 300
tcagcgacat ctttgttatc ttcagagctg tcagaagcag ctgagatggc gtcacctgat 360
tctgaatgtg ttctgtccac atatgc 386

<210> 9146
<211> 251
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-060-Q1-E1-E2
<400> 9146

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tatcactata ggtagacata tgtgatgtga gcagtgcgcg gtaaactgat actgtaatta 120
tgatgtagct cagtgtagct gctgtgaacg tctcaacatt ggtttttatc taccctacca 180
gctgcgttgt cttcaacagt tggttaatgc ggttttactc actgggttta agtagcagaa 240
ggattttctt a 251

<210> 9147
<211> 389
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-060-Q1-E1-E3
<400> 9147

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gattttgtgg tgtggtcaca ctaaacaat catatgaaag gcttggttcc aagtcactgt 120
acgaggctca tgggattgaa aacctggtgc tgccaactag agactacctt tatgcgccgt 180
catttgacaa ctttgcaag gctgctgact tcatccacag aaatgcttca tgtggttaagc 240
tgacttatgt tcaactgcaa gctggacggg gacgtagcac caccgttggt ctttgctact 300
tgggtgcaatg caaacaatg acacctgctg gagcttttga acatgttcgg tcatgcatgc 360
caagggtggt attggcttcc gcacaatgg 389

<210> 9148

<211> 396
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-060-Q1-E1-E4

 <400> 9148

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 agaagcacgc caagaacgag cgaggggaca acaaccatgg cgcggcctcg gagaagcggg 180
 tcaagacgct gccggcgctc gaggcgctgc cccggaacga gcccatcggc ggctacatct 240
 tcgtctgcaa caacgacacc atggaggaga acctcaagag gcagctcttc gggttgccat 300
 ccagatacag agattcagtg agggcgatca ggccggggct gcccctcttc ctctacaact 360
 actccaccca tcagctccac ggcattctcg aagctg 396

<210> 9149
 <211> 386
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-060-Q1-E1-E5

 <400> 9149

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 ggagaacggc gggctgctcg gcatgaatct ggacaagctg gtccaatccg tcgtctgaaa 120
 attagcgcag catgtcggcc cagaataaat tctgctgctt tcgctcattg atggacatat 180
 tggggctggt tcttgcttga ttggaagatc aagactatgt tgcaactggt gtttagctgc 240
 aactgtgtct catgccaaact cagtcacaaa gtctcttggt tagcgctgcc tgccctcgtaa 300
 aaaaagataa cgaatccggc aggtgctcta ccatttgaat aaggaaagtc tagagaatgt 360
 ttgcaaaaat caacaattca acaaaa 386

<210> 9150
 <211> 387
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-060-Q1-E1-E6

<400> 9150

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gaagagaatt atcatcagcg caagacacgg atccaacgga ttcgacgata ttgggctgaa 120
caatgggttca aatgcaagtt cgtgacctcag gaatatgctg agaagaatgc tataaaaagt 180
ccttgggggtg atattctcta tcgaggcctt catcccaaga acagagctga agctattgca 240
cagggtttct atcactgtat ggtccatgga cctcagcctg aaaatgccta ctcaacatca 300
ttgctctggg gtcgtgacga caatctcttc aagcgtaact ttcagcatgc aaaggcatcg 360
gccaaagaat acaagaagtc attggga 387

<210> 9151

<211> 299

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-E8

<400> 9151

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tcttctcacc ggggcatcac cagcaatgac gtctcgtcgt cgtaagagcc aagcacaccg 120
ccgcatctc cttgggcctc actggagcat acgttgcctt gtcggttgct gcggacctga 180
accagacctc gctccgcgtc aacgatatga caatgcagct caacgcgcac gtgagcgata 240
aagtcggtga cgtgggtgcaa cgcatgtga tgatcgtcgt ctacgaagcg atcgacagg 299

<210> 9152

<211> 86

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-E9

<400> 9152

tgccattcga tagctcggtt attatgtaac aggccttcaa ttcattggcc gtcgattaat 60
tgcgtagcca gtgggaaaac tgggac 86

<210> 9153

<211> 370

<212> DNA

ggatgcaaat aaatgaaatt aagaaagttg aagcaggact atcagtaaga ggggaaggctt 60
 gaagttgagg caactgtctt gtataacatt ttctgctttg tgtctgcaac tgttttctta 120
 cttctaagct tatgttgtaa gacacctgct gtaaaccatt gagtgagatc gaattactgg 180
 ttcccatatg ttctgatgtc tattttataa atgtatacat aaactgttga tgcacaatat 240
 ttgatctgaa aataaagtaa taccttcaca aaaagaaatt aaccaacagt aaaaccgtca 300
 gacatgtttt ggttaccaac cgactcagat aaaattgacc acacttatac ctgaggggttc 360
 cccgttgg 368

<210> 9156
 <211> 392
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-F6

<400> 9156

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 ctgtaatgag acagcaattt ttctcctta ctatcgctgt gaattgcgtc gcaaattgga 120
 gaaattaaaa cacggcagta acactgttca tgcttactac caagagttca aatcttatat 180
 gcatcattgt gacatagaag aatccgagga tgatacaatg aatagatttt ttggtggttt 240
 gaaccatgat attcatgcaa gatttcagta tattcctcgt tgcattactg atatgtatgt 300
 ccgtgcttgt acctttgaga gacatatata ggaggatgca ttgggtgact acaacaacta 360
 ttattccagt tcatgctcac caccgccggt tg 392

<210> 9157
 <211> 395
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-F9

<400> 9157

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 ctctcgctcc acctgaggtg gccatacgtc gccaacatgg ccatggctag atttgcaatg 120
 acctaatgtt tcctgtccac cactggaaga aacttgtcct ggacgttgat ccgtttgtcg 180

tcaatgacga cgaacacccat cagccccga ctacatcgtc atttctccgc aaagtacacc 240
gcttaaggac acaaccataa aacaaccttt atgtaccagt cgcggggactc tcacattata 300
ctttagtccc attcttcata ttacactgtt attcagccct taacgacaag tcgtctcgac 360
tagtcatttt tcacagtaga cctccctctc tctaa 395

<210> 9158
<211> 407
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-060-Q1-E1-G1
<400> 9158

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ctttgtgctc gctactaaat tacaataat tgctaattaa aattggcttt gatatacctt 120
gggatccggg tggattcact acttgagcac tatatgccta gcttaatggc tttaaagaaa 180
gcgctgccag ggagataacc cggaagtttt agggagtcac ttatttctgt tgagtgcctt 240
catatagttt aaaaataaca aaaataaaga ggggaaccca aaactttttc aaaaaggaaa 300
gtgaaagtga gaaagacaag cattgttgaa gtgggagagc tccttgaact ttgttcacgc 360
tcacggcaac tttgtgaatc ttgattacag aaacttttca acaaaaaa 407

<210> 9159
<211> 182
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-060-Q1-E1-G10
<400> 9159

tgagtcgtat tagaatgctg ggatgtagcg gatagataat gtatggaaac ttcggacatg 60
tttgttgatc ataggatcat tgatacgag acttctccag ttgatcggtc gatagcattc 120
ttactttttc aggagctatc atggcaagtg gttggagctg ttgatgggtc tcgctactaa 180
tg 182

<210> 9160
<211> 394
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-G12

<400> 9160

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tacagggaca tccagagaaa gattgttgag tttatcagaa agagatacca tattctggaa  180
aaatgcttgg acattgaata tgccgtgata aaaacaaata ctctgttcc tgatgatctt  240
actgaacaaa atgttcctat gggacatagc ccagctgttc cagatatcag tgaagtgttg  300
agagaacttc cccctcttgt accaatttct gccaaagaag tggcttctga tggctcaact  360
gaccaggcac acctttccca tctttacaac aaga                                     394
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<210> 9161

<211> 363

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-G2

<400> 9161

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agaaagaagc ctgctgagat gagaactaga gaaagtagca gaggtcggtc ttacgatcgg  180
cggcactctc cttccccaag ggggcggcca tcttaccgcg gccgaagcta ctcaaggctc  240
ccatcacctc ggcccgcaag gcggaggttc agagacgagt ctccctcgcg ctcccgctcg  300
cccagcggat cgaggagtgc gagtccattg gatgggaagt acggcaggtc ctcacgaaga  360
gag                                              363
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<210> 9162

<211> 273

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-G3

<400> 9162

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 ttcttgctat ataacatcgg ctttggtata ccttgggatc cggttggatt catgttcctg 120
 atgcactatg tgccaagctt catggcttta gacagatctc tgccatagac atttcccgga 180
 agttataggg agtcatttat ttccgtctac tgctttcaga ctctttaagt cacaacatgc 240
 atgactatgg gaccccaaaa ctttttccgg tcg 273

<210> 9163
 <211> 344
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-060-Q1-E1-G4
 <400> 9163

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 ttattgatgg ttcttgctag tgtggtctgc ggatagcaca aatgtccctt gcatgtggcc 120
 aagatgaaga agtggtggtg catgtggcca ggatgaagga taggttgcat ctgttatgct 180
 tggtagcgga tcaaacccta gctatgctaa agactgtatg ctgctagcag tggaaccgta 240
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 gactggagtt taataaataa atacattggt catatgcctg atgt 344

<210> 9164
 <211> 409
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-060-Q1-E1-G5
 <400> 9164

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 tggtcggctt acaaagtgtt ttctcggtat acgcatgaa aatcgaattc gaaatggtat 120
 gaccgtgcaa gttgagcatg ttttaatgta attgtgtaca tagatggcta attgtttcca 180
 agttgtttta ttttataatg tgtgtactcc gcgactgagc tgtacatttc cttctgatcc 240
 tgtattcata tgcgggcact atttgctcca tcaactaaatc tgaaaaatcg tacggtcggt 300
 aggcggcgat tggctctggg aggcgtgggc ctacgataaa aattgtggag gccacatgaa 360

agtctgcggg ggcaaatcga ttggaatcag ggttggcaag gattcaact

409

<210> 9165
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-G6

<400> 9165

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tccgacaaga attctttcgc atccaggcgg agtttgcgga aatcatccat caagatgtcc 120
ttcgtacctc ggggcagttc tacctcagaa atcaaccgtc caacagtgc atcgacacaa 180
tgctacaaat gcaggatgac aacgcccgtt ctttcattac tcccacgata gacggcggct 240
tcatccacgc tccggtcctt tgagtcgagt tgtctagttc tgaaacatca attggctcat 300
gttgtaatta aactttaatg aactttagt atgtctcttt ggttttgaga gtcgttcaac 360
ttagatgtaa tcgatgctat taatgtcttg cttttct 397

<210> 9166
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-G7

<400> 9166

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agtgtggtgt tcgtccgacg aaggtttcag gtgagcgcgc caaggagggtg agatgccagg 180
atgccgtgtg aggcggcgag cacggcgaga tgccgatggt gctgcgtgag aagcggcaag 240
acgtatcaga ggctggagcc gtgatggact gcatcaaatt gggtcgggtg aaccggccgg 300
tcgttctgtt tgttggacta gctgttcatg cgtgagttcg tttagtccta gctgagagta 360
tcgttgctag tagttgatgc atgcatgtag ttggcctggt caca 404

<210> 9167
<211> 415
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-G8

<400> 9167

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ttcacctttt cggggccatt gtttttgggg atatggaggg ttgagtaaga tggataacaa  180
aagtccctag ttccacagga ggcttctact cagcacactt tgatagatga tcagctatgc  240
tgttttccgc atgggggatg tgctctatct gcaatccatc aaagtgttcc tccaatcttg  300
tcacttcctt gacgtatgcc tccatcaatg ggctttggta atctttgttg acttgtctca  360
ccacgagctg tgaatctcct caaatgatca gcttcttaat tcccaattat gcggc      415
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<210> 9168

<211> 343

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-G9

<400> 9168

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gacggagacc aagggaccgg ctggaggggt cggtccggca ggtggcgacg agttgtttcc   60
tgcaggggtct ctgctaggat tggacggctc tatcgggaga ggcttatcgg agtccaattt  120
tcaccttttc cggggccagtg tttttgggga tatggaggggt tcagtaagat ggatagcatg  180
agtccctagt tccacaggag gcttctagac agcacacttt gataggtgat cagctatgct  240
gtgttccgca tgggggtccgt gctctatttg cactccatca gagtgttcct ccaatcttgt  300
cacttccgtt gacgtatgcc tccatcaata ggctttggtc atc      343
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<210> 9169

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-H1

<400> 9169

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gggatgacat tgcaagattc tcggggaatg aactacgata gtaagctcca aaacatgagc   60
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tggttctgct acaaacaggt gaacacgttg tcccagacaa gcatgaccac gtggtagtct 120
 tacaataaaa cactaccgag ttctgggttg gaaccatcac cgtggttaac gaagtccttg 180
 cataagtcac atgattagct cttatgaagg aacttcttct ccttgaacaa atcaatcagt 240
 ggcttggtgt gctcgggaca catatggaat gaaggttgca agtctccaga ccacagaata 300
 cttcgcacgt gtgcatgact gatttgggat gattccaagg aaacaaaaca atcttcctcg 360
 aattcatggc ggcaacttgc atcagatgca ca 392

<210> 9170
 <211> 377
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-H10

<400> 9170
 tcgacgaggg ggaaatatga ccttatatgc aattggctcg gaaactcaag gtgggtccac 60
 tccatggaat ggtctggtca gaaagacttt gccaaaactg ctgaatcatc gtttttagta 120
 gacgatgccc aagctggagt cttgaagagc cacggggcac tcagcttcct caaggttcac 180
 aatgctggcc acatggttcc gatggaccaa ccgaaggccg cccttgaaat gctgaggaga 240
 ttcacccagg ggaaactcaa ggaggcgggt cctgaagaag agtcatctac gaccacgttt 300
 tacaccgcca tgtgatcgtc aacaccgacc aaaaaggga aagaaactgg ctaggtagcc 360
 tgcacgcgtc gcccttg 377

<210> 9171
 <211> 241
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-H12

<400> 9171
 cgctctttac gattgatgtg aaagatggag gtactgatac tacagtcacg cgagttgggt 60
 gattatgaat tcaaagacag cttgtgttga agttagtac tcccgtagca agcacgtatg 120
 gttaaagggtg tgtaacacct ttgagacatg aagtgtactt ggcttgtgca tccatattag 180
 taagagtcgg agactagtga tggcccttct ctaccactct atccccccag aagcaagcct 240

<210> 9172
 <211> 390
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB104-060-Q1-E1-H2

 <400> 9172

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acttgaggga tcatgaaata tgttcctatg atgagcatgt ccaaaacttg gaggaactgt   60
ccaccattga tattactgac gaaaggctgc gtgatgatgt ggcaacattg ctgttttaggt  120
cgaagaagct aaggatgctt ggtgtgagag ctaatagagg tggcaataca catggtgtta  180
tacctttcct taatgagctc cgaaaatata acctcgagtc actcatcatt gaaagtgacc  240
tgtgcggtct ggatgaatgg gagccatggc ctgagctccg aagatttgaa ctgacaaaac  300
tcctcccacg gggtccagag agttgggcct cactggacag cctcaccacac ttggattttg  360
caattcgtaa aatccaagca acggatgttc                                     390
  
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<210> 9173
 <211> 367
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB104-060-Q1-E1-H5

 <400> 9173

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cgacgggaat gagacatctc cccaggacta gtgaagttgc ttaagaacaa gctctgcagg   60
agataccttt ggtcttcagt ttcaaagaca gtacactttc ctgcgataac tcaggcatca  120
ccatcaggcc ttcttgtctc ttaggtttca ggacctacca ctttgtggat catcactgtg  180
cataagccca tgggctgggg ctgacacgag acattcatcc catggatcaa aacaggctgt  240
gattgtctgt gtgcagaaca cataagtgtg taacgtttat aatctcaaca caacacaata  300
tatcgacat gtgcagtcac gagtttggat gtgtccacgg aatagaaca ttcttcctcg  360
atttcat                                     367
  
```

<210> 9174
 <211> 361
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-H6

<400> 9174

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cgacggacgg aacatgatgc tggtgacgag aatggtacag agttgatatg agtttcagac   60
caaaggaagg atcaagcaat tgaacgcaca tttaaaggac ttgcaaggca cttccgcgaa  120
atgttctctg aactggtgca aggtggcaac ggagacctgg ttacgacgac gaagtaggat  180
ggtgatgctg gcgatgatga catgaatgag gacgcgcctc gtgaagcata tcctgaaggg  240
aggatagaga gatacactgg tatgaaggtc aaggttacca tcaactggcag aggagatact  300
cagtcgataa atcatttgtc tggacgacag aagacggtgg tggcattaac actgatcctc  360
g                                                                 361
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<210> 9175

<211> 381

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-060-Q1-E1-H8

<400> 9175

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gatcttgga atgtggcagc tggagcggat ggtgttgcta acatcaatgt tactgactgc   60
catatcccc ttactggacc aaattcaatt gttggccgtg ctgttgctgt ccacggtgac  120
gctgatgatc ttggcaaggg tggacatgag cttagcaaga gcaactggaaa cgctggtgcg  180
cgtgttgctt gcggaatcat cgggctccag ggctaagatg tcatctccac cggccaacgt  240
cgtacagatc tgggaacctt ttcagaatgc agatttgcaa tctctattct aaataagcac  300
atgatctttg atcacttggt agtgtgcacc attcgtgtga attcctatgt gctactctga  360
actttaccac tgtcatttgg c                                                                 381
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<210> 9176

<211> 359

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-A10

<400> 9176

ccgggtcgac gggccggcgt agtcacggc tccggcatgg gcggcatcac ggcgctctcc 60
gatggcatcg cgagcctggt gaccaagggg tgcgggaaga tatctcccct gtgcatcccg 120
cacgccataa ccaacatcag ctccgccttg gtcgcatgg acgctgccga cggcttccta 180
ggcccgaact tctcgatctc caccgctgtg gccacctcca accactgctt caacagcgcc 240
gcggaccaga tccgactggg ccgagccgac gtcatgatcg ccggtggcac cgaagctggc 300
atcatccga tcgccctcgg cgcgttcttc gcgtgcaggg cgctgtcgca gaggaacga 359

<210> 9177
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-A2

<400> 9177

ttcatggaag agaagctaaa gcattaccca gccaccgtca acgatgaagg gatgtatgcc 60
cattcaaagg aagtggccga ggccatgctc ggggaagcta atgtgaagggt ggctccccgg 120
agcatgggtg gcgaggactt cgctttctac gcgcagagag cggcgggtgc attcttcttc 180
atcggcgtag gtaacgagac cgccatggac aggggtgcac ccggtgcactc cccgcatttc 240
gtcctcgatg aggggtgttct tcctattgga gctgcgtttc acaccgcggg tgccattgag 300
tacctgaacc gctcctgaaa actacaggag catgagtga ggtccgtctt ggattatgga 360
gtgaaaattc tccgatgtcc gtatagtgtt agatatccaa aatcgtcttc atttgcttga 420

<210> 9178
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-A3

<400> 9178

cttgctgtac acaccttttg ggagaatccc acttgattgg aatttattag aatactctat 60
gtgcttcact tatacttttt gagctagata gtttttgctc tagtgcttca cttatatctt 120
ttagagcacg acagtggctt aattttgtag aaattgctag tctctcatga ttcaacttata 180
ttattttgag agtctcttag aacaacatgg tatttgcttt gggtataaaa ttgggtcctag 240

aatggtaggt atccaagttg ggtataataa aaactatcat aggaagtgaa ttggatgcta 300
 tgatcaattt gatacttgat aattgttttg agatatggat gtagtgatat taaagtcag 360
 ctagttgggt gattatgaat ttaaagaatg cttgtgt 397

<210> 9179
 <211> 376
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-061-Q1-E1-A4
 <400> 9179

gcatggagac agcaggacgg caaggttggg gaaaggcccg cccaaggaaa acggataacc 60
 catttttggc aaaatgcttc aacaaccgtt ggaattggct acaaacggca tcaaatacag 120
 ctgcaacagg agtcatgttt tgcaacaatg caaaaacggg gtcgagtttt tgttacaact 180
 ggcgtcgcat tttgctacaa atgttatcat tttttgctac ataagtccac cgttgagttg 240
 tgagttgcca tgatggctat aagcagtggc gacgccgaac tgtggtcgtc cggcggcgac 300
 aatgatagct ccttgaagc tccgcctccc agctgggact ggaaatccaa tggcgccgtc 360
 acaccgttca aatccc 376

<210> 9180
 <211> 392
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-061-Q1-E1-A6
 <400> 9180

tcgacgggaa atagaacaca aaaaaaata caaaaagagt aaataaaaat acattacaaa 60
 agaaaatgta caaatcaata ttcaattaac ggaaattgga aatctaataat ttccttcctt 120
 caaaataaat aattgcacca gtcattctaa ggaaaggctt tccaagaata ataggacatg 180
 aaggattgca atctatgtca ggaacactaa ggtctacggg cacataattc ctattttcag 240
 caataagatt atcattaatt cttcccatag atttcttaat agtggaatcc gcaagggtgca 300
 agtttagaga gcaatcatca aaatcacgga aacctatcaa atcacataaa gtccttgga 360
 ttgtggaaac actagcacc atttcacaca aa 392

<210> 9181
 <211> 207
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-061-Q1-E1-A9

 <400> 9181

 gtaaccttcg ggcgttgaaa gtttggttcc ttaggctggc aacgtgaaca tcaagcgttg 60
 ctgaatatgt gcctgcggct gctggtgtat gtactagcca cacatgataa ttatatggga 120
 tgttccagaa agaaaaaaaa ggaaaggaaa gcagtccgac aaggtgatat aaacaaagcg 180
 aaaatcacia taatactgca acaaaaaa 207

<210> 9182
 <211> 388
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB104-061-Q1-E1-B1

 <400> 9182

 gggtgataag taagatgatt gtgatatcaa gattaggagg gtgaatgtta gagctaactct 60
 tgatatttgt attagcatgt ttgagttttg catgtagtct agtctagtgt ggtgttcgtc 120
 cgacgaaggc tttagggtgag cgcgccaaag aggtgagatg ccaggatgcc gtgtgaggcg 180
 gcgagcacgg cgagatgccg atgggtgctgc gtgagaagcg gcaagacgta tcagaggctg 240
 gagccgtgat ggactgcac aaattgggtc gggngaaccg gccggtcggt ctgtttgttg 300
 gactagctgt tcatgcgtga gttcgtttag tcctagccga gagtatcggt gctagtagtt 360
 gatgcatgca tgtanttggc ctggtcac 388

<210> 9183
 <211> 396
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB104-061-Q1-E1-B2

 <400> 9183

taaattcccc aactccaaaa acctggaacc aaacacggtg gaattggtac cgccgcaccg 60
 ccggctatta cctcgetgct cggagcaagg cttgacggcg gtattcctcc ccagcatga 120
 gatccatcct ccgtgtggcg tctgtctgcg tctcatcgaa cgccaggacc cgctgggagc 180
 gatgcttgac ctcgtaaggg agaaccgctt ctgctccata gatgaggaag aacggcgttt 240
 ctctgtttgg cttgggtcgcg gcggtgcgga tggaccacag cacggactgc agctcgtcga 300
 gccagccctt gctgtagggc tcgagcttct tcttgaaggt tcgggtcttg aggccctta 360
 ngactttcgc attggccctc tcagcctgcc cattac 396

<210> 9184
 <211> 372
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-061-Q1-E1-B3
 <400> 9184

caataaggta acggtccctt aaaaaaacgt taaacggcaa aatacaaggg taatttcaaa 60
 aattccttcc cattgtattt gcaatggcct tttcccattg tataaaattt ggcactctcc 120
 atcgcatctc caaaggacaa ggtctgttgt aacgatcttc tctgatttta cttagcactc 180
 tccatcgcggt ttctttggac aagtttagtt gcacgtcacc ggctctacc aaccacatat 240
 agttcttttc cctcagtcac tggagccaac acaagacatg gaagcacaag aggacttaag 300
 gtcaggtcgg ctccggtata tgggagcggc gtcaactgtg cgttggcagc ttgttctcgc 360
 aacggcaatg gt 372

<210> 9185
 <211> 393
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-061-Q1-E1-B5
 <400> 9185

cgacgggagg tatgagccat acagaacatg gaatacagta gttttaacag caatataaat 60
 aaagaatgag ttcattaagt accttatgtg gtgggttttc tttcttgac taacggagct 120
 tatgagattt cctgttgagt tttgtgttgt gaagttttca agttttgggt aaagatttga 180

tgggtctatgg aataaggagt ggcaagatcc taaacttggg gatgcccattg gcaccccagg 240
 atattcaaga atagccaaaa gcctaacatt ggggatgccc cggaaggcat cccctctttc 300
 gtcttcgttt atcgagtgat ttactttgga tctacacttt tactctccac ctgatatgtg 360
 ttttaacctg gaacgtcctg tacgatatca gtc 393

<210> 9186
 <211> 370
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-061-Q1-E1-B7
 <400> 9186

tcgacctcag cgaccgaggt gcagcgcattg atggcggaga tcgacaccga cggtgacggc 60
 ttcacgcact tcagcgagtt catctccttc tgcaacgccg accccgggct catgaaggag 120
 gtcgccaagg tcttctgaat cagttcattt cacctcacc gtccgatcca ggagccgatc 180
 catcgacgta tggcttcgta tatcaatttc atgcaactac ctactctggt cccgatccag 240
 cctcagcttc acctgaggcc ggcctaatt ttgtttgatc actttttgtg ctaccagtag 300
 taactagtga tgatcactgt tccatcattt atttatttta catcatcaca agtatcgttt 360
 ctttctcaaa 370

<210> 9187
 <211> 397
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-061-Q1-E1-B8
 <400> 9187

cgacgccggc atacgggagc ttggggccac cggctggctg catgaccgca tacgtgtcgt 60
 cgtctcaagc ttcttcgtca aggttctcca gctgccatgg cgctggggga tgaagtactt 120
 ctgggacacc ttgctggacg ccgaccttga gagcgacgcg ttgggctggc agtacatctc 180
 cgggtctctg cctgatggcc gtgagctcga ccgcattgac aaccgcagc ttgaaggcta 240
 caagttcgac ccatacgggg agtacgtccg gcgatggctg ccggagctgg cgaggctacc 300
 aacggaatgg atacaccacc cctgggatgc acccgagtct gtgctgcagg ctgcaggaat 360

tgagctaggt tccaattacc ctctcccat tggtgag

397

<210> 9188

<211> 316

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-B9

<400> 9188

ttccaaagcc atcacgcagg aggtcggcat tgaacttaca caagttcagg ttctcaacac 60
cttccagttc cgccggcacg gcataaaatt caggacaagg agttgccgcg tcataattcc 120
aagggaaaaa acagcacaat agctgtcagt gactagcttg cacatgacat cggagcacia 180
agattgaagg aaaaataatg tagtaaagat agatcattca ccaggatggg gaagcatttg 240
ttgctcgggc gaacacaatt ggtcagcgcg aaatggctga gatgaggtag atgagtagct 300
ccaacttgaa aacatc 316

<210> 9189

<211> 403

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-C1

<400> 9189

ggttctaata taaagtttta aaaacaaaaa taaataaaga ggggaactta aaactttaca 60
aaagtaaaag tgaacatgag aaggacgaac accattggag tgggggatat cctgaacttg 120
ttcatgccca tgggaacttt gtgaatcttg aattacagaa actttttaac aaaataatta 180
tacccttgta caaattcatt ttattataag tttatgtgcc aaggtttgac tttaggatga 240
ttagattgct tgttggtatg tgcggtgcaa aaacagaaac tttggctgta gtgcgtgatt 300
ttacattttt tactggaatg tcaaaagttt ctgaactttt tacacaatac tgctatgcaa 360
ttttttttat tttgccctat tttttcagaa tttttggagt tat 403

<210> 9190

<211> 163

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-C10

<400> 9190

acacagcgat cgcaagagct gtagtacgta cgtaagtgtg gcttagcctc ctctgcacgc 60
catggcgatg ctgaacaaga acacgggctc cctcagcttc ttcgtggccg ccctcatggg 120
ggtcatgggt gccatccttc tctctttctc gttcgacgcc ctc 163

<210> 9191

<211> 319

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-C12

<400> 9191

gcacgagccc gtcaatagga tgcgcatctc gaggacctga tcgcagtgtg aatgggtccat 60
ggagtccac actgcgagag catcagatcc agcgaatcac acatgtcacg tacgatgcag 120
cgctcataat gatgtgagtc attggcgaca cgacgtgac atcacgagtt cactactc 180
gtgatacgac ctccaaaggc atcatccagg gtggcgctact tggcatgac agcattagac 240
actcgcgact tcagattagg gcgtgagcct atgcagataa catccattgc agcgatatgt 300
ccggtggcgt gagactgtg 319

<210> 9192

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-C4

<400> 9192

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aataatattc atgatgtata aaaaaatgta caatgtgtat gcaagaaata gacttaaaaa 120
tatgtattaa aaatgttaat attgtaatac aaaattttta aatgtatgta ttagaaatat 180
tcctgatata tacaaaaatg taaaatgtgt atgaaaaaaaa gtccacataa caaatatttc 240
tttgaaaaaa atgttagtca tgtgttttaa aaatgttcaa cgtgtataaa aaatgtttct 300
tatttaggga aaattttaag tgggtataat aatgttccta ttctatacga aaaggacag 360

gatcaaccga tggaaaccaa taagagaaag aaataaaaat taaggaaacc taaaaaaaaa 420
caagg 425

<210> 9193
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-C5

<400> 9193

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acaacggcca gttcgccatg gcgtacgagg acaaggacgg cgacctcatg ctcgccggcg 180
acgtcccgtg ggacatgttc atctcctcct gcaagaggct gaggataatg agaagctccg 240
aagcacgatg atgacgatga tgaaaaggac ccgatcaagc acacatacat acatgaagca 300
atctggagat gatggaaacc ggccgtggca catgatcagg agaaggacgc acgcatgggc 360
cagatgcatg atcaggccat ggggtgaacgg cgaacggagg ccgggttacc cgggcacgcg 420
cct 423

<210> 9194
<211> 210
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-C7

<400> 9194

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ggcaggcaat gagcatatgt gtgtaggctc cagttgagta acctttacac accttcccct 120
atatgagcac atcaaagata atcatataca gactcgaaag tctagtagcc gaccacgtaa 180
aattattctg taacagatct gcgtactgcg 210

<210> 9195
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-C8

<400> 9195

cgacgggaat cagataactca gatgctcagg agcaccaaca gatggcccaa tggaacaatt 60
taaacaatct aggtctcatt ctgcatgatg gaatttctat aaccattgga accctatcta 120
tccttgacca caattggtgt ccatcaattt cagatccta catcgccacc gtgtcagtag 180
gagcatgcaa tctcttttct cacgtgacac agggttcagt agccaccgag tggcgaccat 240
cgatacactt cgagaccata tattttgccg acatcacatg tgtacctttg aggaaaatca 300
ttttgtgata gtctaatatg agaataaatc cctgggtcat ccaaagacag agaccctttt 360
gtacagcaac tgtcacgaat tctggcc 387

<210> 9196

<211> 211

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-D10

<400> 9196

gcgggtggaat gaatcctttg cagacgactt agatacgcca cggggcattg tcagtggcag 60
agtggccttg ctgcgacgat cactgagca ttcagcccca gcgtctcaca ggattcagtc 120
taaggaaacg agaggccgag cattgtacta cactttgtga gccacttctg aaaagtgtac 180
attgaactgt cagcatgat actgtgggcc t 211

<210> 9197

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-D11

<400> 9197

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aattacaaac ttaaaaatta atctcattag gtgtttttga gagaaatgaa ctgcgtgatg 120
acaacagcat gcttcgcaat gaaatcctgg agcttcagaa caagcttaga atgcgtctgc 180
agagcaaccc tatttggagc caggatacta ctacaagatc agccgttgca gtaccttatc 240

ccacaagcgg agtgttccca gtacatcatt cgccacattc accagtcac acctcgacag 300
 cactttctct gcatcccgta atcactgagc aatgctatgc tgccccacca cgagagctgc 360
 agctcttccc gggaagcttc atcttcatcc ac 392

<210> 9198
 <211> 375
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-D12

<400> 9198

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 accctcataa gcaacaccgc cgcgacggcg catgggtctg tacatatctc tgtcgattcg 120
 aacaacgcag caggggtgctc tgctagattt tcagcgccgt ggcggtcga ggacaggcgg 180
 ttttaagatt tgatttgctg tagtgctagg accatgtgta acaatgtact tatatgcagt 240
 gcagcctttg ggggctgcgc acaggtgatt tgtatggttg cttacattgt tggatattta 300
 tttgtgcaca accgaaataa tatgcacca ccgccattgg ttccgcttgg taaatgccag 360
 ccagaaattt gttcg 375

<210> 9199
 <211> 329
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-D2

<400> 9199

gggggcgaag cagagatgcg tgcggccggt tctgcaacga tgccaccaac attgcatccg 60
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 cttcttcgtc gttgctgctg cctcagccgt tatctagttc ttgcttttagc tatgatgtgc 180
 taggctttgc ttccaactac tgtatgctgt gtctgaagtg ttgtgtgggt gctctgcttt 240
 tactttcaga tcttgcaaga tccttttgag gtgctgggct ggggttcgtc gtaatccccg 300
 gtcattgtag atagtatgtc gtgtgcggg 329

<210> 9200

<211> 322
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-061-Q1-E1-D3

 <400> 9200

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 aaggacgacg acggccacgg cagcagcagc agcgacagcg acagcgactg agccagctcc 120
 ggccgcgtgc agtgcagggg agatgaacgc gtgggttaat ttggagcgtg tggtagcata 180
 tgtatgtaat gcttgacatg tctcatggat cttgtaatgt aataaccggc tgcactgcat 240
 ggtgcttgta ataataacgt taaggaatct ccattggtaa tttggtacca tccttttttc 300
 caagcttttt gtgtatgtat gt 322

<210> 9201
 <211> 346
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-061-Q1-E1-D4

 <400> 9201

 aagggttca agttccttgc cccctcctt ctctgggtcc tcctccaaaa caacggcccc 60
 aattgaacaa cctaaggcct tcaattgcgg cacccttgc cgtaccggt gcagcaagtc 120
 gagccggccg aatttgtgca acagggcgtg caacacgtgc tgccggcgat gcgactgcgt 180
 gccgcccggc accgcccggc acgaggacgt ctgcccctgc tacgcccaca tgaccacgca 240
 cgacggccgc cacaagtgcc catgattcaa ccgccttctc gacggccggt cgaggcta 300
 gcataactaga tcatggcgtc tcagtaaata tcccatcaag ctagct 346

<210> 9202
 <211> 391
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-061-Q1-E1-D5

 <400> 9202

 tcgaccggaa agtatgtccc tagtcccggc tgaagaatgt atttagtcat ttagtgtcga 60

tgcaaggcag taaccatttc ttgtcttcat cctcgtattg tatagcatat agaggtacaa 120
 gggagagaga gagagagaga gagagagagt tacactgtaa caacatacat ttgggatcct 180
 atctatcagg gcgcgggcac gtagtcatac tgcattggata gggacgtgcg tttagcatcc 240
 aggagaagtt gttttcagca taaaaatatt cagtctaaca ccgatgacca cgacaacaat 300
 gtctttctct tcttccccta cttctcttgg gcgtcatcat cggcggctgg cgagcacggc 360
 tgagtgatat atggtcacgg gctcacggcc t 391

<210> 9203
 <211> 394
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-061-Q1-E1-D7
 <400> 9203

cgacgccatg gaactaacc gccctttctt gcgcctggca tgtggcggcg aggaactggg 60
 gacaccatac cgggacacat ccggcgagtg gtgtcggcac gaggacgatg attccgaaga 120
 tcttgagccc tggcagttgg acggtgagcc ggtatccgac gcggaaacca ccaatgagga 180
 gtaatgcagc aacttggccc tatgctgccg tgtgccatgt ttgcttgccc cagaatgatc 240
 gaaacagctc tcattcagtc tgtgttggtc tcttggtgta ttaccggata agctatattt 300
 tcttgccgtt atctttcttc atgtgcccgt tccgtgtgca tatggcatcc tgtttgttgt 360
 tacattgtgc tatatatgct gtagtattca gatt 394

<210> 9204
 <211> 352
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-061-Q1-E1-D8
 <400> 9204

cgacggggga ggggtactac atcaggtccg ggatcgtggt gatccagaag aacgcgacca 60
 tcaaggacgg caccgtcgtg tatagcaccg ccgggtcggc gtgacggggt ctgcgacaac 120
 ctctgcgctg cgttgatcgt cgtcgtcgtc tcgaggcccg ggagggactg aagaagtgac 180
 ccggggacgg gaggcgtttg aagcttgaat gactgagaag gcgcgcgcgg gcagcattag 240

tagtaagtag tagtaaggag cagtggaaca aagtaatagt cgttcgtttt tcccctgtaa 300
 taaataagag gctgtgtgtt gaggtaaaga agtggcagcg agcaaacaaa ct 352

<210> 9205
 <211> 328
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-D9

<400> 9205

gactaataga ttagtgatga gagcacgtgc gtttctgaaa tttttgtaaa tctcgttttt 60
 ctctagtcct tccttgtcaa actgtcaccg tgtcagcatc agcattagtc ctactagtag 120
 taagataatc ctccttacag tttccaattt gtgggtccaa ttgtaaaatg ccgttctcct 180
 gttctgttca ccaattttta gacacagaacg tcataatgat actctcatac tgttgctttg 240
 ggacaagtat aacatcttct gaaatgtcaa tcttggtcga ttcacagcca ttatatgatg 300
 aatataattt cagatatcac catggcat 328

<210> 9206
 <211> 368
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-E1

<400> 9206

ggggatcaaa agaagattaa catgtcaaca ttctgcaagg tgttcggtaa ctcagacttc 60
 ctcacagat caatctcgat tgccgagttc caagggcgcc cgcttgctga tcagcctgct 120
 gtcaataatg gccgtcctcc tgggtgctgc aatgtcccc gtgaccttca ccaaggctca 180
 atggtcgccg atgctatcag tgtcatctca tgctggatatg aagacaacac agagtggggg 240
 cagcgtatcc gatggattta tggctcagtc acagacgatg ttgtcacacg gtaccggatg 300
 cagaaccgtg ggtggaagtc agtctactgt gtcaccaatc gtgacacctt cactgtact 360
 gcaacct 368

<210> 9207
 <211> 274
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-E10

<400> 9207

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agcacggagg tgtcttaatt ttgaagaaat tgctagtctc tcatgcttca cttatatcat  120
tttgagagtc ttttattaca tcatgggtatt tgctatgggt acaaaattgg tcctacaatg  180
atgagcatcc atgttgggta ttgtaaaaac taccacagga tgtgaattgg atcccacgat  240
cgatttgatg cttgacgatt gttttgaggt atgg                                     274
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<210> 9208

<211> 391

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-061-Q1-E1-E11

<400> 9208

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tgcggtgcacc atcatgtcct catcttcac tactgcatgg ccacaaagcc ttgtgaccgt  120
ttcgccaggt ttgtcagcaa caccgactac acgttctcta cggtggaac ctgcaacgat  180
gtaaaggcgc tcaaggttac aggcttggcc tgcaaaaacc ttgtcgaaat ccgtgagcac  240
tatagggctc ggggcagctt gaagaaggac tactgggttg aactcgctc ggccatcatc  300
gacncctact atgacaagat gaagcaggat gccaaagaaa caaatcctgt atcctggcac  360
ggggcctaaa cgcggaact agatgaaact c                                     391
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<210> 9209

<211> 220

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-E12

<400> 9209

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agaatcaaag aattctagct cattggatca tagacttcta gcttattgga gctagttata   60
cgtcgatagc ttgttatttt tttattctat atttgtgtta cctgatgcga actatttctg  120
```

attgtaaacc tgatgtgaac catgtttgat cgcaatgtgc caggtttggc tcttttaaaa 180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaca aaaagatcaa 220

<210> 9210
 <211> 385
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-E3

<400> 9210

ggggggattc agtaacctcc cggactccg gcaaatccc aatttcaccc ggaaaacttc 60
 caatatccaa acataggctt caaatatata aaccttaatg tctcaaccat tttgagactc 120
 ctcgatcatgt ccgtgatcac atccgggact ccgagcaaac ttcggtacat cacaatgcat 180
 agactcacia tataactgtc atcgtaacct taagcgtgcg gaccctacgg gttcgagaac 240
 aatgtacaca tgaccgagac acgtctccgg tcaataacca ttagcgtgac ctgaatgccc 300
 atattgtctc ctacatattc tacgaagatc tttatcggtc agaccgcata acaacatacg 360
 ttgttccctt tgtcatccgt atgtt 385

<210> 9211
 <211> 423
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-E4

<400> 9211

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 attgaaccaa atcgcaggaa cttctctagt ccttggaag caaacagttc acaatctctg 120
 cttgatgaca ttcgggacca gcatggttgc ttttcttctg ttcaagctca gagaaactct 180
 actccatgcc tttttgcaga tggaacaat ttccaacaag cagaaagtgt caacagcaat 240
 atcaagcaca tgtgcagtat aagtcctcgt tagaatgtca ttctattctg ttgggtggcgt 300
 gttggatcga ccataagtag caaggacatg cgcttcttac cacactttaa tatcctgcc 360
 gtaactgtga taatgtctta cgctggcacc aagtaccaa ctgaaaatac ctggccattg 420
 tgc 423

<210> 9212
 <211> 379
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-E7

<400> 9212

tgcacgggag gtcaccccca ttgcggcgaa gaagtgtgca atctccgact gggaacccct 60
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 aagactaat ctaaccaact ccagcctctc ttctctgcc atgtttacca tgggcctgtt 180
 cttgctggcg gacgggggtac actctaagtt tgacacacca tgggtcccggt tcttttggga 240
 aggagcggga ccaaaacgga aataccatat ggttaaattg caggccgtgt gtcttcctaa 300
 agcccggggg gtcttgggat catcaactcc aagttgatga acatcgact aatgtgcaag 360
 tggatctgga aaatgactc 379

<210> 9213
 <211> 224
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-E8

<400> 9213

tgcacggaga gcaggtacaa gatgggggtca agcctcaggc cgggaactcc tccatggcca 60
 tcatctgcga gtcccacgtc tccgccttgc tctgcacgt catcgctcggt ctgggcccaa 120
 tccagttcgg cttcacgggc ggcttctcct ccccgacgca ggacgccatc acccgcgacc 180
 tcggcctctc catctccgag ttctccgtgt tcggctcgct ctcc 224

<210> 9214
 <211> 362
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-E9

<400> 9214

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caagatgaaa aatgaattta tggtaaattg ggacgggttg cgaacgaaag ataaagaacg 120
 tgtactgggt cttggtgccca caaatagacc ttttgacctg gacgaggctg tgattaggag 180
 gttccccgcg aggctaattg taaatttacc tgacgcatca aatatagaga aaattttgaa 240
 agtaatttta gcacaagaag agttgggaca agatactgat ctggagtcac ttgctaatat 300
 gactgatgga tattcaggaa atgacctgaa gaatctatgt gtaactgcag ccactaccc 360
 ca 362

<210> 9215
 <211> 218
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-F11

<400> 9215

ggggctaata gaaggggaga aggctccaga aaaacggtaa caaccgggt tacctttgga 60
 acatgcccac aaccttaaaa accccaaaag aaggaagggt tccagcacia acaaccactg 120
 aaccgcgca ttgcacacia agcccttgca cagacacacc attgtcttgg tcaccatgtc 180
 caatggcatg tattggtgga cattggttgt aaattgtt 218

<210> 9216
 <211> 379
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-F12

<400> 9216

gggagggagc tgcaagcaag gagtgaaggt ttcaacttgg aaaggaaggt ggaaacaggg 60
 gaaatgtggc ttttggttaag ggggaggggg cggaagggt gatacttccg cggaagccga 120
 aaatttgaa ttgcttcagc gaaaaactgg cgacaaaagt gtcacagac acggtccctt 180
 atttagaact gtgtatgata tgtgaacatc acaaacgatt cagatagctt aaccgtgtg 240
 cgatgagttt gaacgtcaaa aattttgttc caatttcctt gggtacagtg ctcatccaca 300
 tcattgcata atttgggtac acaaaggaga ctacagcaca cccgcacttc ttaatcgagc 360
 aagttcagca attaaacag 379

<210> 9217
 <211> 381
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-F4

<400> 9217

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gggatacaat gaaatgcgac gcaagctaca caaaaatgac aaataccgat tttgaaacat   60
tgatcgggtgt gtaaggctca ctacaaataa aatcaatgat tttaaacct ttgtgtacct  120
tgcattgtcaa tgtattttct catgaaattt tgcacacatg tagtatacat ctatcgttag  180
tgggtaattt tttccagaat ttttgagat tgtgaaatgc gaagtttcaa tttttcaaaa  240
caaccaagct caagcaccaa acgtgttttc tgaggtagca gtccaaaact agaaattcat  300
aaaaaagaga atacaagtgg aatagggcca gttaaaaaac taaaaagttg gacttgtcta  360
aaagtacctc tagaaagcct t                                           381
  
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<210> 9218
 <211> 389
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-F6

<400> 9218

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gcggacgagg tgcagcgcat gatggcggag atcgacaccg acggtgacgg cctcatcgac  120
ttcagcgagt tcatctcctt ctgcaacgcc aacccggggc tcatgaagga cgtcgccaag  180
gtcttctgaa tcagttcatt tcacctcagc cgtccgatcc aggagccgat ccatctacgt  240
acggcttcgt aaatcaattt catgcaacta cctactccgg tcccgatcca gcctcagctt  300
cacctgaggc cggccctaatt tttgtttgat catttttttg ctaccagtac taactagtga  360
tgatcactgt tccatcattt agttatttt                                           389
  
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<210> 9219
 <211> 380
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-F7

<400> 9219

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ggacaacttc tcgggcgagg aatgcaacac aaagagccaa atcgggtgggg tgtttggcgc 120
tcttcgtgtc actgatgacc tgttggtgag gggggcgat tttaggaagc agcagcttga 180
caacaaaaca acatcaccta actctaactg aagaggacag ccggtgtgat ttgctcttac 240
attgatatcg catgcgtatg aataatggc caatggaatt gggagcggag taagaagctc 300
atgttgccct tatgcatgta acaatcatgc ctgcctgcac ggcccgtac ctgttggtcc 360
aatgcctggc tgctgcctg 380

<210> 9220

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-F8

<400> 9220

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atgctttgct tgaagaaaaa ttgctcaaag ttgatgattt ggctaggaac gttgatagac 180
tttcgcttga tgttgattct cttaaactta gatcttctcc tcctaagcat gcaatgagtc 240
tctcaaagta atgagaattt cctttgacga gtgcaaggaa agaaccgcta gattgcgtgc 300
taaaaaagat agctttataa aagcgtgttc tagtttccac gaaaataatg atgaagatct 360
taaagttatt gatgcgtctc ctattaga 388

<210> 9221

<211> 187

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-F9

<400> 9221

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ttttgataaa ttctaaattt ttgcacgagg tgcattgagtt ttgactaat gttgactcca 120
 tggataagac gcactctcac ctttcgacca ttgctagcct ctctaagacc gtgcacttta 180
 tgccggt 187

<210> 9222
 <211> 436
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-061-Q1-E1-G1
 <400> 9222

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 gatgaatgcc tactgcgacc gccagtctgt ggatatgaaa gctattgcat tcctgtttga 180
 cggtcgcagg ctccgtgccg agcagacccc tgatgagctt gagatggaag atggcgacga 240
 gatcgatgcc atgctccatc agaccggagg ccgcctccct ccacgcgcct agaagaagcc 300
 gttgagagtc ctgcttggtg tcgggtctaca agactctgat ccatcattag agagcacatg 360
 aacgaatgaa agtctaaaaa gaacttgtga ggctctggcc ccatgccata gctgaaggac 420
 attaggaag gttttg 436

<210> 9223
 <211> 350
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-061-Q1-E1-G10
 <400> 9223

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 ggcattgtggc cacgctagaa tttttgcgcg tacctggaca ccaggggctt ttttaccag 180
 ggctctatct cggcccgctc tcatagagac cgaatacctt acggagtgtt cggcgtcgcc 240
 agtttggtc tatatgcac agctccgaat catgtctttg gtcaaagtgt gggtttgccc 300
 ggctcctgtg tgttgctgcc ttacattccg tcatatcagc taatgcggca 350

<210> 9224
<211> 401
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-061-Q1-E1-G11

<400> 9224

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ttgatgctgc tatgaaatac aagaacgaag ggcatgacac tatcatcctg gctggtgctg 180
agtatggcag tggaagctca agggattggg ctgcgaaggg tccaatgctt caggagtgga 240
aggctgtgat agccaagagt tttgagagga ttcaccgtag caatctcgct ggaatgggca 300
tcgtcncctc atgcttcaag gctggggagg atgccgacac tcttggctta acaggccatg 360
agcgctacac catccagctt ccgactgatg tgaatgaaat c 401

<210> 9225
<211> 364
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-061-Q1-E1-G2

<400> 9225

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aaacaaacca aaccttgagg aaaagcttaa ggaaaagggg tgtacaggag agtcaggttt 120
cgatcctgtg gaactgtggg ttacgggccc accatgtggg ttaaaagtan gaagggcgga 180
gacgtcttgc gtgatcatgc aagcaaggta tgtcagagga tagcctatca gttatgtcgg 240
caacaacatc agtaccaagg gcgagggatg aagagaacca ttttcctgct cgttgaacga 300
ggcggaccag taggcaaagt tctcatccat cggtggttac cgaaatgtca tcaacaagaa 360
taac 364

<210> 9226
<211> 379

<212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB104-061-Q1-E1-G3

 <400> 9226

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 gagcgaagac taatgatcaa catttaactt gataatgcat atgtccaggt gaacctcctt 120
 ggagtccccg tgcaccgcat cggcgggtaa aggatgccat gggttttcca agtccacatt 180
 ggcgggatag tcccagctcc ccggagtcca agtccgttca atgaggccgg tgcgcccgc 240
 cacgcgaccc ggaggggtag taacaccgac cacgcacccg tacataggcc tcgtgtcagt 300
 gtcagtgtca gtggcgctgc ccctgacgca cattacagag acgggggtggc ggcttgcgcg 360
 agcctcgccg gtgcccacg 379

<210> 9227
 <211> 366
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB104-061-Q1-E1-G6

 <400> 9227

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 attgcatcat atgcgagact ttctaagatc tgactgctgt tgcaccatat gaacatgacc 120
 aactagaaaag aggagggttag gaatgacctt ataagtgggg tggtttcgtc ttgcacgtgg 180
 gataacacaa tgggaccagg gacctagagg aagaccagcc tgccgcatgg cggagagaga 240
 tctacatcag catcgcgact cgtgatcggg gccctcgggg gaataggatc atcgcgaagc 300
 agcggactcg cgatgggaag aaggaaaaca gtgatttctc cgtgcgtcta ggtcgatgcc 360
 tcctta 366

<210> 9228
 <211> 433
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB104-061-Q1-E1-G8

 <400> 9228

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tattgatggc cttccttatg agtggcggtc ggggacgagc gatgggtctt tgctaccatt 120
ccatccccct aggagcatgc gcgtagtact ttgtttcgat aactaataaa tttttgcaat 180
aagtatgtga gttcttttatg aataatgctg agcccatgga ttatacgcac cctcaccctt 240
ccacattttc tagcctctct agtaccacgc aactttcgcc ggtaccataa acccaccata 300
taccctcctc aaaacagcca ccatacctac ctattatggc atttccatag ccattccaag 360
atataattcc atgcaacttt ccaccgttcc gttgttaata acacacttca ccattgtcat 420
atttccatgc atg 433

<210> 9229
<211> 387
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB104-061-Q1-E1-H10
<400> 9229

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gagggggcggg aagattggag cttgaaatta ttggaaggag atacactgat atggcttcaa 120
tattgctgtc attgggcatt cctgttgaag ggggcgaggt taaagctgct tataagcaag 180
ccctcctgaa gttccatccg gacagagtat cgagaaacga tatttatgag caggtcaaag 240
caggggagac gttcaagttc atctcgcgct ttaaggagaa gctcaagata tagcttcnct 300
gctaccagtt atataggaag gtttaacttt ttgataggct gaaatcttgt cagcaggtca 360
agctgtgaaa ttgattgacg ctgaacg 387

<210> 9230
<211> 399
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-061-Q1-E1-H11
<400> 9230

aagtgataga gattgatatg atgagaatag acccgggggc cataggcttc actagtggct 60

tctctcaata gcataagtat tctacggtgg gtgaacaaat tactgttgag caattgatat 120
aattgatcat atttatgaga atatctaggc atgatcatgt atatatgcat cacgtccgtg 180
acaagtagac tgaaacgatt ctgcatctac tactattact ccactcatcg accgctatcc 240
agcatacatc tacagtatca acttacacac agagtaacgc ctttaagcaag atcacatgat 300
ctacaaatga taattcatgc aatatgaaat aagacccatc ttgtttatcct cgatggcaac 360
gatacgatac gtgccttgct gcaccttctg tcactgggt 399

<210> 9231
<211> 338
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-H12

<400> 9231

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ggctcaccgg cagacccccg ctgcgaacg gcaggctctgg aatgttgcca atgtcgagcc 120
ctccagcaaa tccgggacag cttaccattt tttatggtgg gtcagtatgt gtgtatgact 180
cagtgccacc agagaaggct caagcaatca tgctcattgc agcagcagct gctgcggcct 240
caaaaagcaa tggcaccgct gctgttaagc ctccagcgat gtctgcgaac aatgcgatcc 300
aagccatgct tacgcggtcg ctctcactcc agaacact 338

<210> 9232
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-H3

<400> 9232

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cgtcataacc cggttgatac ttggtgagct tggctctcttc ggcaatgatt gtagcatgag 120
ggcgaatctc cttgacacaa gcagcaaagt cttgttgatc aaaaagagtt ccatcttcct 180
tgagactggg ataccactg gctatgtccg ccggatctaa ctctggtacc taggctttgg 240
cacggctcaa agctgtcaca gttccggctc tagcacagga tcgcttgatt tcttgggaacc 300

tagtgggcaa gatggacaac ttcttcaaga catcacttaa taagtttggt tcttgatttg 360
 cgggggagat agtggcaaga gtccgctga 389

<210> 9233
 <211> 373
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-H4

<400> 9233

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 tccggctgaa aaccagaaac ttgcccgcga caaaattatt tcggttaaatt cacagaaacg 120
 tgctttttgtg ttgattattt tttaggctga tcaatacaca aattgtccag gacttcctaa 180
 tttggttagga ttttttagtgt tccagaagtt tgcgttagtt acagattgct acagactggt 240
 ctgttttttga cagattccgt ttttcgtgtg ttgtttgctt attttaaatgc atctatggct 300
 agtattaagt ggtatgaacc atagagaact tgaatacag taggtttaac accaaaataa 360
 ataaatagtg agt 373

<210> 9234
 <211> 360
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-H6

<400> 9234

cgacgggtct gatttggttg tgttttttgtg tttaattagt gcttgtgccca agtataaccg 60
 ttgggaagac ttggggaaaa tcttttttaatt ctgcccgat caaaacagaa acttttagcgc 120
 tcacgataac tgcagccatt tttatttcga aagtataca tagttaatta ttcttgcata 180
 taattagtaa atacattcct cacatccagc aatttatattt agaattgttg gggttccata 240
 tcttgcgtta gcaacagatt actacaaact gttctatttt tgacagattc ggtatttcgt 300
 gtgttgtctg cctaatttga tgaatctatg tctagtacaa tacttttagaa accatacata 360

<210> 9235
 <211> 367
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-H8

<400> 9235

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cgacgggaga caaattggag tacgaacggt tctgcaaaat gggcctacgg ctttctctca   60
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ctccaactcc gtcctccaag tcgaccaaaa gaaatgtcat ttaagtgtga tatcttccga  180
gctgcaatta caatctattc tcctctctct ttcttccctc ctcaaagagc tgagactttg  240
ctcacttgag tatcaagctt tagggctctt tgtaatacct ttttgcagtt tcccttttgt  300
ggtagcaatt gtagtatatg gatttctctg tttgttcacc aatagaagca caaaaggtga  360
cagtagc                                           367
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<210> 9236

<211> 355

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-061-Q1-E1-H9

<400> 9236

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tcgtacgcgt atggtatgat gggctgggct tgcgagctg gaccggccag agataacaat  120
accggtccgt tctcatcccc aagaaaagag aaaatgggtc cgttgaagag ggcttgctcc  180
cactcacccc cgcaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaacaca aaaaataaaa  240
aaataaaaaa aaaaaaacaa aaaaaaaaaa aaaaaaaact tgaaaaataa caaaacaaaa  300
aaaaaaaaaa aagcggccgc caaaaggtt caaacctaac ttacccttga atgca         355
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<210> 9237

<211> 359

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-A1

<400> 9237

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cgccgacgag atgaaggctg cgatgagcac catggatggc atcataaaca cgggtgtctgc 120
aaacatcccc atggcccctc tcttcgggct actcaagccc aacggcaaga tggatcatggt 180
cggcctccca gagaagccta tcgaggctcc tccctttgct ctggttgcca agaacaagac 240
cctggccggg agcttcatca gccgcatgag ggacacccag gagatgctgg acctcgcggc 300
gatacatggt gtgacggcag acatcgaggt gatcggcgcc gagtacgtga acacggcca 359

<210> 9238
<211> 272
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-A2

<400> 9238

gcggttaatt cagtatgatg attgtgatat caagattaag aaggtgaatg ttaaaaccaa 60
tcctgaaaat tgtaataaca agtttgaatt ttgcatgtaa tccaatccaa tgtggtgttc 120
ctccgaagaa agctttaagt taacccccca aaaaagttag aatccaagaa tgcgttttaa 180
gccgccagca cggcgagatt gccatggtgc tgcgtgaaaa gccgcaagac gtatcaaaag 240
ctggaaccct gatggactgc atcaaattgg gt 272

<210> 9239
<211> 397
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB104-062-Q1-E1-A3

<400> 9239

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attttgctag ctagttgggtg tgtgctcggg gcaaatcaac ccagctgctc atgtgtacat 120
aaagggcaaa cccagtagaa gaagagccgg tgagggcggg ttgagctgag aacggagggg 180
gcttaaaggg taaactcatc aataaaatta aaatcaaggg taaactaant cgccccgccc 240
cgtttgaact aatgcaatcc ccggttgccc tctggctccc ttgctcaatg ccgtgtactg 300
caatccctgt taatttcac tttgtttatc ctgtttgtta tccgaatcaa ctgataccgt 360
gcatgaattg aaacaataat atatactcca ttagacc 397

<210> 9240
<211> 300
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-A4

<400> 9240

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tagaacttcc atgaatgtgt gtatttctat acacgcacaa tcaactttat cccataatta 120
aggcttg gcc acacctgtgc aacgtatcca tatgtattgt gatgatacta cttaattatc 180
tcagtgcac tcaggtactt cgcataataa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aacaaaaaaaa aaaaaaaaaa caaaccaaaa aaatcaaaaa aaaaccaaac aatacaaaaa 300

<210> 9241
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-A9

<400> 9241

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caaaatgtag tggcaccaaaa gctttggtga actgattaat tgaattgtat ggctgtagtg 120
aattaaacgt atgagttagt acataataat gtttgtgtga aatggagggg atgctgttgg 180
tcgaggtgat ctaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaattaaaaa 300
aaaaaaaaaa aaaaaaaaaa aaaaggggcc ccccaaagg ttccaacttt aatttcccct 360
taaagcaaat ttaaaccccc tcaaagggc ccccaaatt caattccagg gcc 414

<210> 9242
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-B12

<400> 9242

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ctcctcttgg ttaactgcgc tatcaaccat gtctgtataa tgtactgtgt tgctgacggt 120
ggaagttgat tcacaacact gtgaccagta ggcagggctg cccacctccc ccatcgtgtc 180
tcgacctctt gtgtgcgtct gaccacatca gtacatcgcc tccgctcatc cctcgacgtc 240
ccaccctact ccctctctct ccagtcctct gtctgctg 278

<210> 9243
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-B5

<400> 9243

cgggtcgact tctactccaa cggctgcggt ggctgccgcg ctctccaacc caagattgcg 60
cagttcgcta accggaatcg ggacttgctg tccctgcaag tcaactacga gaagcacaag 120
tccatgtgct acagcctcca tgtccatgtc ctccctttct tcaggttcta caggggagct 180
cagggcaggg tcagcagctt cagctgcacc aatgcaacca tcaagaagtt caaggacgcc 240
ctcgcaaagc actcgccgga aaggtgcagc ctcgggcccg cacgggggct cgaggaggcg 300
gagctcttgg ctctggctgc aaacagggac ctggaattca cctacaacga gaagccgacg 360
ctggtgc 367

<210> 9244
<211> 321
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-C1

<400> 9244

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tactatTTTT ttatgttcgt ctcatcttgt ttaccggtga gatgtgtaca ttaccgggtc 120
ttgggaaggg gaggtgaatt gaaatttggt tcttaaaatg tatgtcttca aaatattcct 180
gatatatata aaaatgtaca catgtgtctg aaaaaaagtt cacatgtcaa atatttcttt 240
gatgaaaatg ttagtcatgt gtttaagcca tgttcaacgt gtttaacca tgtttcctac 300

ttagggaaaa ttttaagtgg g

321

<210> 9245
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-C11

<400> 9245

cccgccga cgggatggtc aatggatggt atctggctga ttatttatat cctcacctat 60
ataaatatat gcagtgaat attcttcagc ggtagatagg gtccctgctg tcatgtgcat 120
tctacttgac actgggtttt tttcatttct gcacgggcag acctaaccct gtttactga 180
atgttgcaag taatacagac caaagtttac aaccaatggc agaagaatgc gttttgacac 240
ttgagaaggc acataaatct taaacacaaa tacatctcct ggaggcatat gtggcttgct 300
tcggaacaaa caatgtaggt gtttcacagg gttgggtcgc tgcaaaaatt acttaggtgt 360
gcatgacaga cttaatatat atcttaaacc aaaaaagggt aaaactgttc caaagctaaa 420
tggcggttgt gttcacaaaa tga 443

<210> 9246
<211> 364
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-C3

<400> 9246

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acctggagaa gctgctggac ctggtggaga agagctgcc acaaatacac aaggagacga 120
tgatccacaa ggcggtgctg aaagcctgaa gtgaaccatt ttgaattgaa tgtggccttg 180
tttaggttgt gtgcgtagta gactttctct atggatctga attcactttc actgtatggg 240
taaaactatt ctctctgctc aggtgggcat cgctgtttg ctttgggaac tcgtgtgcga 300
accggtcccg aaatactgta accacaggga atgaccaatg ctatttgccg tagttttcca 360
aaaa 364

<210> 9247
 <211> 226
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-062-Q1-E1-C5

 <400> 9247

 cggggagact aggcattgtca aatccccgac gtgtcatgag tataactgg ccttcgtatg 60
 atattgaata cttttttacaa ggggtgcccc ccatatgtcg aagcctaatt aatcctggat 120
 acgaaatcat agctcttccc caatatgatc taaacttacg taaccgtcca ttctatgtca 180
 tagtccttcc agggaatacc ctaactcatt caccgaccgt cctttt 226

<210> 9248
 <211> 411
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-062-Q1-E1-C7

 <400> 9248

 gacgggacag ccaaactggg acgtcatcta cagtgtactg gtcccccttg cactatttta 60
 taaagtgcc aggggacagc ctgacatgca ccacacctct tatgggcatg gtgccccatg 120
 ctcaattgcc cccacgcca ctcacctagc ttaggaaatt agctaaccat tgcatataag 180
 ggcacacatc catccatcca gggaatggat ccccatggac tctcacgcac acaccctatc 240
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 atgagcactc acatgctcac ggccatgagc atggccggcc actagcatgc cacatacgag 360
 gccaggtgcc agatgcctac ggcatttgac tcagatacag ctcgaggagc a 411

<210> 9249
 <211> 313
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-062-Q1-E1-C8

 <400> 9249

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tgtattgctg ctgctgcccc tctttattct catctcacag aggcacgcag tggctgttat 180
 gcatcttata gtcttggcta tcgcaatccc gaattctgta tatcattgcc cgtgccatcg 240
 tctcgtgaat ggtagcagaa ttgcacaaa aaaaaacaac aaaaaacacc aacgaacaca 300
 cgaccaacca cac 313

<210> 9250
 <211> 139
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-D1

<400> 9250

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 taaatagggc tactaacatc tctgctctag tgcttatcaa actgatgtac aaagatgttc 120
 ctatacgttg tggagttga 139

<210> 9251
 <211> 441
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-D11

<400> 9251

cccgggccga cgggtcatct tatcttgata cattactctg tttatcatga gcttaataact 60
 ttgagatgca tgctagatat cggctcttag gggcggagcc aggatttgac gatagggggg 120
 cgaagtattc aataaacata tagaagtttt ttttcctaa caatgaccat tctatgagga 180
 atacaagata atatggattt tgctattaga aaatggtaga ttttcattag tttgaatgtg 240
 gttcttatgc ctaaaaactca caggacaaaa tgtataatct tatatggaat tctaacaata 300
 acaatctctc agtttgtgaa attctaacaa taataataac ttgcgatgat gtagacatga 360
 gccgatgata taccttagat ctgaagttag tcctgttgag tagtgctaag ggcaaattct 420
 gaaactaaga tgatagaatc a 441

<210> 9252
 <211> 358

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB104-062-Q1-E1-D3

 <400> 9252

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 cggttcctga ggacagctac aatgagacaa cccaccatgt actcctacat ggcctctcat 120
 cgctaccttt accaaatcgt gttcacacac ttagctcaca catagtagga catgtttaca 180
 cacctctgat tcctcctcga tgaatcagac ctgactcaac tcgaagcagt agcaggcatg 240
 acaaacaagc atgaatgagt aggcacatca tggctcaa atactcctact catgctagt 300
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<210> 9253
 <211> 312
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB104-062-Q1-E1-D4

<400> 9253

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 acaatgggac agcagacggt cactgagaag aagttcggag gaattgcacc aaagaagcct 120
 ctgatttcaa aggaccatga gcgcgcctac ttcgactccg cggactgggt cctcggcaag 180
 caagctgcaa gcaacaacgc acaggcggcc gcaatcgagt ccttgaagcc aaagctaaag 240
 aggacgcccc atcaccagct cccacctcgc aagccggcct gcgcgtcggg ctgacgcacc 300
 gcgacgcgac aa 312

<210> 9254
 <211> 251
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-D5

<400> 9254

 gacgggaggg gaaagtggaa cttttggcga tcgtggtggc tttgtccctg ctcggtcgcc 60

gcatttgacg tgcagtacat catcgacgag tgatgtcacc gttgatctgt acgaataatt 120
 tgtgtcaaat aaacgggggg aagtgactag tgaagtcaaa cgacctgtaa cttgttacct 180
 tattcttttg caaatgttca tgctaatacat gccataaaca cgaactgttc gcttcaacaa 240
 atatgacaaa a 251

<210> 9255
 <211> 270
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-062-Q1-E1-E1
 <400> 9255

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 ctaagcaagg ccagctcgc cggcaatctt ctagttcaag gagccttcct gggactagca 180
 gacttctaac aggtgaaact gtacagcctg acacaccaca gccaccagag gaaattgttc 240
 acaacatcca cttccggagt gatgggttca 270

<210> 9256
 <211> 388
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-062-Q1-E1-E10
 <400> 9256

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 ctggcggcga ccaacaacgg cgacatcgtg gacgcctaaa gcaaagcaat gaaccacgga 120
 caccaagagg cgtacgtacg ctggtgtttg ggggcgcaaa atcaataaga tggttcgggtg 180
 aaacggagga tgcttaggga cgagggcttg tctttgtgat ttgtcagact cgtgtttaat 240
 tccgatgttt atcttttagtt ttcttgtgtt agcgtatttt gttcatgcca cctgcccgcc 300
 atgtgctctg ctctgctctg cctcacggca gtcctatgga tgatgaatcc ttctggaaca 360
 agaggaggga ataaaaaggt tgagtttt 388

<210> 9257

<211> 369
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-E3

<400> 9257

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 cacaagtccc tcgtaccac acaaaacgat agtaactcgc aaccaacgct taggggttgt 180
 caatcccttc acggtcactc acgagagtga gatctataga gataatattt ttggtatttt 240
 tgatagatag atgcaaagta aaaataaagg taaagtaaaa acaaagcaag taaataaagt 300
 gatatagatt gatatgatga gaatagaccc gggggccata ggtttcacta gtggcttctc 360
 tcgagagca 369

<210> 9258
 <211> 454
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-E4

<400> 9258

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 ccgattcctc ctctgccgga tgctcaagtg gataatgatg gagcttcagt tgaacagagt 120
 acttctaacg ctaagagtgg tgagaacggt gccatgaatg agggagctgt tgacaagggt 180
 gattcgtcca aattagatgg tcaagacaat accaatggta gcatggatgt tgatgctggt 240
 agccaggaag agggaaacaa tgttcctgcc gctcctgatg ctacaattgt agatgtaggg 300
 aacacacctg tatcttcaga ttaagctgtc tcgaatgaag agagtgcgt ggtccctgaa 360
 tgaaacatct accacatacc tcattctgcgg cgcatgtcac aagcatgatg aggaaggtaa 420
 ctagaaacag gatgcagttg caaagtgtga aact 454

<210> 9259
 <211> 307
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-E5

<400> 9259

acggggtaag ttacgtgatt cataagggag atgtgagagt caagatgatg acaaccccat 60
gacttcaagc tcaagatgga cttcaaaatt cactactgga tggaggacgg ttgacgggca 120
ccctacagaa accagcggat ggtcgggatg catggagaag cgccatgaca tcttgcgga 180
agcttcaccc agccacgatg agatggatgg ataccccatt gaccggaagc ttacatgtgc 240
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<210> 9260

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-E7

<400> 9260

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ttgaaggagg tgaaacaaaa tcagaaatcc tgcagaatct taccgagttc cagttttctt 120
gtgttatgta taatgctgtt ctagagaatg cgtgcagtga gcttggtgcc cgtatgtctg 180
ctatggacag ctccagcaga aatgccggtg aaatgcttga ccgctcttaca ctgacataca 240
acaggacacg tcaagcatct atcactactg agctcactga gatcatatcg ggtgcctctg 300
ctcttgaggg atgatgatga aactttacgc tatcatcttt tttatttttc tgttccaatg 360
aaggccactt ctaatctaaa aacagccttt tgcattctcc tgtgattgga tct 413

<210> 9261

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-E8

<400> 9261

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cctacgacga aaaaagcttc aaccagctac gggaaaagtt tcaaatcgta tgacagaaac 120

ctatgaacga ccaaagaaaa gttacaaccg gtgacaaaaa aaaacttcat ctgacgacga 180
 aaaaagcttc atccgacaat gaaaaaagct tcaactgtga agccgtaagc catggacgac 240
 aaacgaaaaa gttacaaccg gccgttgcaa aagctacaac cgcattgaaa atgtcacaca 300
 gtcatagcaa aatgttggtta caattgaagc atttctgtta gcggttgcaa cttttctaata 360
 ttgcatgggtg tctagttgta gctttctctc tcaatgggtg gagctttttc caactacagt 420
 tgaagcttt 429

<210> 9262
 <211> 388
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-F1

<400> 9262

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 tacgttaacc atttggttg aaaaaatttg atttgttttt gacgggtaat ttttgtttcc 180
 attataggtg gacacatga tatactccct ctgtttttga atataagccc ttttagagat 240
 ttcacgata cggaactacat acggatgagc aagttgggag gctagtgcact tatattcagt 300
 cgggtgatgag atgagatgag tcgactttga cgtggagat ggaagcaaac tgtggaaagt 360
 tggaccggca accatggcca aggaagca 388

<210> 9263
 <211> 350
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-F12

<400> 9263

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 gattgacgac ttgttttctt ctatgtatcg aatatgtgga atattatttg taatatactt 120
 gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaacaaaaa 180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggggcccccc 240

aaaggattca aacttaattt acctttaaaag gaaagttaaa acccctcaaa aatggcacca 300
 aaattcaatt aaagggccct tcttttaaaa ggttctaacc ggaaaaaccc 350

<210> 9264
 <211> 339
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
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<400> 9264

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 gacgaggaga ttgaggatga cgatgctgag gatggtgagg atcctgtcaa ggcgcaatcc 180
 tcatcaaaga ggaaggggtc tgggtgggaa gatgaagatg atgacgacgg tgatgatgat 240
 ggtgatgatg atgagaagcc tccatcaaag cgatagtcaa tttgttcgtg ctgatctgtg 300
 atcttctctg cttgggcca gaaggaaaat aatcctcat 339

<210> 9265
 <211> 357
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB104-062-Q1-E1-G10

<400> 9265

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 ctccccgaca aggcgatctg gttggaggat gtcgaggatg cgaagctagt gaggcagttg 120
 tccgcggagc cgcccggaag gccagcaaat aacaccgagg aacatgaggc gtccccgaat 180
 tacttgctgc acgtatggat gtatctagat gtattttagt tttagatata tccatttcaa 240
 cgacgagtaa tttggaatga agggagtatg agatcaaggt ctcatattata ctacatatct 300
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<210> 9266
 <211> 405
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-G12

<400> 9266

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tcttctgagg agtgacaaga agaacatggg tctcctcttg gcagagtttg acaagataaa  120
caaaaagctt ggcattcgga aggaggatct tccaagatt gaggaaaatc ttgaaatgga  180
acttgccaaa gctgagctga cggaacttaa gaaggaagtt gttgaagcaa tggaggggtca  240
actaaagagg gaggagttta aagatgaggg gatgcctgac gtcaggaagt tggacattag  300
aaacttcctc taagtccttg attgatgata acccttgggg tgaccgatct gtgatttttc  360
ttttcaagtg acggcaggtg ctgttagcca caccgaatgg atgtt                               405
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<210> 9267

<211> 370

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-G2

<400> 9267

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gatgtgcccc cggttggaag gagttagttg caagccagct agatggttgg ccgggtcatg  180
ctagtgcatt catgggctag cccggcgggt catgtgggtca tgcattgata tggatcgtgc  240
atgtagtggg tagcctagtg cgtgagttag ttgccgggtg tgcaggccgt gtggtgtgtg  300
tgcacgggta taaaaacccc tctccatgt actgatccag ttgagccggt gtgtagccat  360
gttaccactg                               370
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<210> 9268

<211> 445

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB104-062-Q1-E1-G6

<400> 9268

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aatccactac cgggtgcagct gttcactttc acccagcggc ggcgcgggaa ggcctccgag 120
ccctttcttct tgcgcgccgt cccgtcgccc accgaaccac gcaccaagaa ccttaaggta 180
taatttactt attccacatg cattgctcta gttgcatgta taccatgaat ctaggacgtg 240
gttcaaagag gaaaggagtg ggggaaagta gtgggaaaag ttgtatagca tgaatctagg 300
acgtggttca aagaggaaag gaagggggaa agttgtatag catgaatcta ggacgtggtt 360
caaagaggaa aggaatgggg gaaagtagtg gggaaagttg tatcacataa atctaggacg 420
tggttcanag aggaaaggaa agggc 445

<210> 9269
<211> 78
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB104-062-Q1-E1-G8
<400> 9269

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tttcaactgtc ttgatgtt 78

<210> 9270
<211> 370
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB104-062-Q1-E1-H10
<400> 9270

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tgcagatggc agcaagccca caccaaaaag tcattttctc caaatctatg gctaccttta 120
aaagcatatt gaaagtggag ggtgtaacaa atagtgatga tcacaacttt tcacattagc 180
tagtcattct gttttctctg actattgatg cagtgtaggt agattgttat gaaggagcta 240
cagaaaactc catcaagaaa atgtcaataa acttatgatg attgtaacct agattaagct 300
taactagaaa ctacgtaatt tgtaacagtg gtaagggttt gctgcatgat tcatgctcat 360

taacanagct

370

<210> 9271

<211> 214

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-H12

<400> 9271

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cgccaatctg atttgttcta tgacctcttg atacttttaa cccccaatta attaaggcaa 180

tggcccccat gttaaaaaaa aaaatttaaat aaaa 214

<210> 9272

<211> 226

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-H3

<400> 9272

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actgaagaat gttccctgga aaataatgta catattgctg tcttttcttt ctcttgtaaa 120

taaaatgaac agtatagaaa tttcaggatg aaccaactag gaagacattt gcgttgata 180

ttaattaaaa cctattataa ttgttgaata ttcaattttg taaaaa 226

<210> 9273

<211> 345

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-062-Q1-E1-H6

<400> 9273

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gggatttgaa ataaaacgat gggagatgtg ccacgctctt aaatgccagt cttctgtctt 180

aatcttgcta aattacttgt tgcattttgc aaaacagaaa aaaaaaaaaa aaaagcaaaa 240
 aaaaataaaa catccaaaca attgcacaac cagaaatgga aaatgggaca caccatttaa 300
 acggcccatt aaacacagaa aaaaaaaatg gggcccctca aaggg 345

<210> 9274
 <211> 330
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-062-Q1-E1-H8
 <400> 9274

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 gttaagttgc aacggtgcaa ccaaacacca tggaggctta gggacggtga atctgcatcg 180
 acagtgatgg atggaaattg ctgcacctcc ttctccata aaccacgggg accttgatca 240
 gttgtattag cctccccatc tatccgtcag gaagccctga ctttccctgc tattgctgtc 300
 gaaaatgcta cccttgacga acatgacctg 330

<210> 9275
 <211> 293
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-063-Q1-E1-A3
 <400> 9275

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 cggcttcacg gacttcagcg agttcatctc cttctgcaac gccaaacccg ggctcatgaa 120
 ggacgtcgcc aaggtcttct gaatcagttc atttcacctc agccgtccga tccaggagcc 180
 gatccatcta cgtacgggtt cgtatatcaa ttcatgcaa ctacctactc cgggtccgat 240
 ccagcctcag cttcacctga ggccggccct aattttgttt gatcattttt ttt 293

<210> 9276
 <211> 319
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-A7

<400> 9276

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gaggatttcg cgacgcacgg aggagacacg aacgatgttt ttttcgacga accggatcat 120
gagcatcaga aacccatggc tcttcttatg gatttatatc caggagtgtc tacaggaata 180
catagcatcg actaccagat cctattcaac cagaaaacta gctacctttc agaccatggt 240
ggtggtgccg gcgacacttg ggctagtgga taacatcacg gccacaagt cgtggacaac 300
atcctggaca tggtaaatac 319

<210> 9277

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-A9

<400> 9277

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tttgctctgg tacttcactt atatttttta gggcacggtg gtggagtgtt tttatagaaa 180
ctattgatct ctcaagcatc acttagatta ttctgagagt cttaaatagc atggtaattt 240
tcttaaataa tcctaatatg cttggtgttc aagaatagta aaaactttct tatgagtgtt 300
atgaatgcta tgagaagttt gatgcttgat aattgttttg agatataaag atggtgatat 360
taaagttgtg ctagttgagt agttgtgaat ttgagaaata cttgtgttaa agtttgtgat 420
tcccgtagca tgcacgtatg 440

<210> 9278

<211> 213

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-B1

<400> 9278

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ctttggagaa tcggcggttc ttcgtgcatg aatctggaca agctgggtcca atccgctcgtc 120
 agaaaattag cgcaccatgt cggccctgaa taaattctgc ggctttcact cattgatgaa 180
 cagattgggg ttgtttcctg cgtgcgtgga aga 213

<210> 9279
 <211> 427
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-063-Q1-E1-B4
 <400> 9279

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 gcctagaatt acatccaaac tctgggattc caatactatg aggtctgcgg aaaaatcatg 180
 gtttccgatg ctgagggtcg aatgacagcc taagcctgcc gtcacccctc cccctggggg 240
 aaataactga aaccgggttc taagggttct agtgggcaac cgtactttt ccacaactac 300
 ccttgatatg aatgaatgcg ttgcaccgga atcaaagagt accaatactg gatgtgaatt 360
 taataaaaac ttaccaacca cagtgtctgg ctgatcatag acgtcttcca cgtcaagggtg 420
 attcacc 427

<210> 9280
 <211> 197
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB104-063-Q1-E1-B5
 <400> 9280

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 aacactccta cgtcatcaat gcgttgcccta aactccgttg gggtcggtcca gaatcccatg 180
 tgaatgtcaa attgcca 197

<210> 9281
 <211> 298
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-C5

<400> 9281

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tcacatctat ctccctgcct ttcccctcct agtcatcccg tgagatggac agaccagcg 120
cactccgaca atggctgccc acgcgactgc caaccacatt tcgatcgtac tctccatcta 180
ccatccgccc ctctgcttcc atttgcaatt ctccctggggg atcgatttcc aggtctgctt 240
ccagcgcacc atcgtctggg aactcttcgg cattatctac acgctctggg tcatcacc 298

<210> 9282

<211> 109

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-E11

<400> 9282

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aagctagaag cctccaacaa tagcttcaca acggtcaaca tgatcttcg 109

<210> 9283

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-E12

<400> 9283

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cttaaagttg ggaggcgagc aagtagcccc ctgcttagtg tttggcgaca gccaaaggtca 180
agccgtaaac acttcggcca atgttatgaa cggcccgctca tttaatatag ccatcggatc 240
actgaccggt ttatgcttta ttatggcagt cagttttcgg ctttctccac cgagggtgctt 300
aaccatgcga gctggaagca caatcgcagt ggttatcctt ttgcacacct aaccgaacaa 360
agcggaatgt aggaggcaag cacaggagcc gggcaaccca actatcgacc gaagacacaa 420

tttgaaaccg atgcatattt agcaatatcc aa

452

<210> 9284

<211> 427

<212> DNA

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<223> Clone ID: LIB104-063-Q1-E1-E2

<400> 9284

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atatatttta ataacacatg ttgtttttaa ccaagaacaa attactttgg ccaaaatatt 180
tttgtaaaca ggataattat tctactacaaa tagggtttat gccacgggtg tggaacacgg 240
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aagccgccgc cctagtggcc cggctctacat cgacttgccg ggatcgcggtt tgttcgcttt 360
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aagcctg 427

<210> 9285

<211> 98

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-E4

<400> 9285

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cagccactgt aggtcacttc aagagagtat gccaaatt 98

<210> 9286

<211> 193

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-E6

<400> 9286

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agtttgccac ttgttaaaga ttcctcccta catagcggtg tcatgccatg tgtggcttgc 120
tctcaccagg gaagttgagt tgttgatatgt tgtgtagcag aatgatgctt tctgcctgtg 180
gaagtaaaga cac 193

<210> 9287
<211> 110
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-E7

<400> 9287

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atactaagga ccgcgagcac aaggatggca tgattaagca catcatgacc 110

<210> 9288
<211> 364
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-F10

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gcgaaggcta aatcgactac taacggcaca gcaacatcac gatgacagct atagctattg 120
acacagctca ggacgctctc gtgcatcatc gcacaatgta ggcgaaatcg atgaacgctt 180
gggagaagtg tggcaaacag atacagtcgc aaggtatggt gcatgtgata tcatatctct 240
gcaatgcttt acatgtctca cagatcatgg gacgtcgaat aataacctcg ctgcagtgaa 300
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ggta 364

<210> 9289
<211> 354
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-F4

<400> 9289

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tctcggagtg gaacgagtgc ccggagctcg gcgtgctcgg tgacatgctc gccaccgcgg 180
agttcgcgtc caaagtgtcc atcctcgtca tccagcagca ggccgggatt accactggcg 240
gcgatgccga ctatcaataa tagggactgg ttcgactttg gttcatcggt acattgtttc 300
tttctcgttg aatatatgta tgtatgttgt aatgaaagca aggtaaattt gtcc 354

<210> 9290
<211> 237
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-F9

<400> 9290

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aactatgaag aggatctcga tctacactc gtgtgtcagt tcaattacta ttttagatgc 180
atgttgcgc tgtgtgttg cactgccagg tagacgtgca tgcgtcatca aagctca 237

<210> 9291
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-G7

<400> 9291

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tgatgaagaa ggcatat ttt aggaagcaac aacttgacaa caaaacaaca tcacctaa 180
ctaactgaag aggacagccc gtgtgatttg cgcttacatt gatatcgcat gcgtatgaat 240
aatgggtccaa tggaattggg agcggagtaa gaagctcatg ttgcctttat gcatgtaata 300
atcatgcctg cctgcatggc ccgctagctg ttggtccaat gcctggctgc ctgcctgaac 360
tggcgtcaat ttccagtttg tttttgtaat atataataac tcttctgtat tgtgcatta 419

<210> 9292
 <211> 450
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-G9

<400> 9292

tcaagaagtc cggggtcgac agtcaattaa atgtgtttgt ccaacgggcc cagaggatag 60
 gcttgtcaac tgtagacctt tccacctcct gtgtgccact gtggcaaccc ctttttcta 120
 taaaaggagg cccgagggtga ccaggagggg gattcggctc ttttgggcaa agttgcaccc 180
 cgtagctagc tcaagaacac aagaacactc gaatacatcc accaaagcag gactacggta 240
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 cttcgcacaa cctcgcaccc gccaaaccata aaagggatcc cagtgacccc ataggtgtcg 360
 tttccactta cttctctggc gcgccaggta gggcgcgcaa ttgtgagaat ctggtctggt 420
 cggggcagcg acttcattat ggctgtcatt 450

<210> 9293
 <211> 397
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-H2

<400> 9293

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 caaggaagat gtcagagaag attgggatgc tggaagtgga aatgcagaag gtccagcagg 120
 ccctggtgaa gtatgaggag gagcagacga cgtcgaaaac cgtgggttcag cgggtccaagg 180
 tgcaactggt ggactatctc tacggtcgaa ggcgggaaag ccggaagccg cggttctcgc 240
 cctgcgggtt catgagagcg aaaaccattg atgactgact ctgccttcgt tcgcgccgct 300
 cctttttttt aaggcggagt gtggaacgtt ggggttttca gtttcagatg gagcgactca 360
 ttagttcatg tctttctacg taaatacaga aaaaaga 397

<210> 9294
 <211> 472
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB104-063-Q1-E1-H4

<400> 9294

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gggcatgaca gtcttgaagg gcaaaggcat gggtcgctac tgggcgtcat tcataactcc 120
tggcaaagcc gcttcccagg cagtgtacca tattccacgg acatttttgg tctccaagaa 180
cacccgattg ggtgtacttg aggatgagct tggcaagcct ggaggcataa tcatcgagac 240
agtgaggaga gatgacatct gcgtgttcat ctccggagcac aagcctgcac agataatgcc 300
atgggataag catggatgcc agattaagct catagccgtt gaccacaaca ctccggggatt 360
cgtgaactgc cccccgaaga agaccatcca ggaggtagtc tttgccagct tcggcaaccc 420
ggtgggggtca tgccggaact tactgtagg aacctgtcac gttcccaatg cg 472

<210> 9295

<211> 336

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-A1

<400> 9295

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gacgccagag cagtacgtcg tgaagctgga gcaatcaggc cagaccattt gcatcagtgg 120
gttcatggcg ttcgacgtgc cggccctcg cggtccgctc tggatacttg gagacgtctt 180
catgggcgcc tatcacaccg ttttcgactt cggtgagagc aggattgggt tcgccaaatc 240
cgcgtgagga cttggtgtat caaggttcat ggccggtatt gtacatactg caagcacgtg 300
caagttgcaa ggtcaacaat aaacttatac ggagta 336

<210> 9296

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-A4

<400> 9296

gcggtcggct tcacgggtcg acggacaaga aacagtagaa cacgatgcgg gagatcaagg 60
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 ccaaggtggt ggagcagctg agcgggcagt cgccagtttt ctccaaggcg aggtacactg 180
 tcaggctttt cggcattcgt cgtaatgaga agattgcctg ctatgtgacg atcaggggtg 240
 agaaggcaat gcagcttctc gagagtgggc tgaagggtgaa ggagtacgag ctcttgagga 300
 ggaacttcag tgacactggt tgctttgggt ttggtattca ggagcacatt gatcttgga 360
 tgaagtatga cccatcaacc ggcattctatg gtatggactt cttcgtgggt ctggagcgag 420
 ctggataacg cgt 433

<210> 9297
 <211> 395
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-001-Q1-E1-A5
 <400> 9297

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 aaagaggtcg agatatattt cgggtgctgga gtttaagtggc ctaccattg agaagggtcc 180
 agatggtatt ggagatcttt tcaatctccg ctatttgggt ctgcgtgggt caaaagtga 240
 gctccttcgc aggtctatcg agaaactttc aagtttggtg aactggacc ttccagggtc 300
 tggcatgaac gagctgcta gaggcattgg tgaactataa aagcttaggc agttattcac 360
 tgacaaagct attgatcgat ttacgacaga tttcg 395

<210> 9298
 <211> 432
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-001-Q1-E1-A7
 <400> 9298

acggttaagga tttcccgggc tcgactacct gatccactcc aagtgggtgc cctgcctcga 60
 gttcagcaag gttggcttcg tctttcgtga gcacaacagc tccccgggt actacgacgg 120

gcgatactgg acaatgttga aactgcctat gttcgggtgc aacgacgcca cgcaggtgct 180
 caacgaggtg gaggatgtca agaaggagta ccctgacgcc tatgtccgcg tcacggtt 240
 cgacaacctg cgccaggtgc agtgcgtcag cttcatcgca ttcaggccac cgggttgcca 300
 ggagtctggc aaggcctaaa ctacgagttg aagcaatggc ctatgtatga gtgtcctttg 360
 tgaacttcac ttttgtccag gactctgctt tccgaccaga gcatatTTTT cgttcggtaa 420
 gatctgtggt tg 432

<210> 9299
 <211> 371
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-A8

<400> 9299
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 gtacgacgac tatgtgcgca agtgggtgac ctctaacggt atcgagaaca ttggcaagaa 120
 gctggtgaac tcgcgggacg gaccagtgc ctttgagcag ccaaagatga cagtggagaa 180
 gctgctagag tacaggcaca tgctcgtcga tgagcaggac aatgtcaagc gtgtgcagct 240
 tgctgacacc tacatgagcc aggcagctct gggatgatgct aaccaggatg cgatgaagac 300
 tggatccatc tacggtgaaa gggcacatca tggacttttg cctgtaccgg caggatgcac 360
 cgatcggact g 371

<210> 9300
 <211> 430
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-B3

<400> 9300
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 ccgtctgtct gggtcaggat cgcgaccag tgggcaacgg caggtctgtt catctggtcc 120
 ctcgttgctc ccctcctgtt ccagacagg gagttctaga tcgacctggt tacctgctaa 180
 gagtgcacat tccgttttga gcacctactt atcgatcga acgtgtttcg gctgtgatga 240

tagctaagct gactatctgt atctggtctg taatattgtg tgagcaaacc catggcaagg 300
agctgggtgtt tgtgtgacgt tgttgagtct ggtttgcata atgtgtgacc taaggcattg 360
ttgccagtat ttcaacagtg aagatacgct ctttggttgt atatatattg aagttgatca 420
ttctctgttg 430

<210> 9301
<211> 452
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB29-001-Q1-E1-B4

<400> 9301

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ggacagtttc tggagttgct ggtcctcttg tgattcttga caaagtgaag ggtcctaaat 120
accaagaaat cgtcaacata cgattgggag atggcacaac taggcgtggt cagggtgcttg 180
aagttgatgg agagaaagct gtggttcagg tttttgaggg aacttctggt attgacaaca 240
aatatacaac tgtgcaattc actggtgagg ttctaaaaac tccagtatca ctggatatgc 300
ttggccgcat tttcaatggt tctgggaaac ctatagataa tggcccacca attttaccag 360
aggcgtacct ggatatttcc ggaagttcta tcaatcccag cgaacggaca taccctgaag 420
anatgattca gactggcata tctacaattg at 452

<210> 9302
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-B5

<400> 9302

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tcatcttccg tgagcacaac gcatcccctg ggtactatga tggccggtac tggacaatgt 120
ggaagctgcc tatgttcggg tgcaccgacg ccacacaagt gatcaacgag gtggaggagg 180
tcaagaagga gtaccctgac gcgtatgtcc gcatcatcgg attcgacaac atgcgccagg 240
tgcagtgcgt cagcttcacg gccttcaagc caccgggctg cgaggagtcc ggcaaggcct 300

aaacagctca ctcacgacag gccatatata aagtgccatt gcagttttgt caactctgac 360
attgctttgg gttttccttc tccatttatc tttcttattt gttcctaaga atatgtgta 419

<210> 9303
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-B8

<400> 9303

gggtggacta cctgatccgc tcaaagtggg tgccttgcc tgcagttcagc aaggttgggt 60
tcatcttccg tgagcacaac gcatcccctg ggtactacga tggccggtac tggacaatgt 120
ggaagctgcc tatgttcgga tgcaccgacg ccacgcaggt gatcaacgag gtggaggagg 180
tcaagaagga gtaccctgac gcctatgtcc gcatcatcgg attcgacaac atgcgtcagg 240
tgcagtgcgt cagcttcacg gccttcaagc caccgggctg cgaggagtcc ggcaaggcct 300
aaacagctca ctcacgacag gccatatata aagtgccatt gcagttttgt caactctgaa 360
attgctttgg gttttcctct ccattc 386

<210> 9304
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-C1

<400> 9304

ccacctgtgc tgagaaatcg acggccagca cctcacctcc gccgccatcc tcggccacga 60
cggcagcgtc tgggcgcagt cccccaactt ccccagttc aagcctgagg agattgctgg 120
catcattgaa gactttgacg aacctggaca ccttgacca actggtcttt tccttgagg 180
caciaagtac atggatcatc aaggtgaacc tggggttgct atccgaggaa agaagggcac 240
cgggtggcatc actatcaaga agacgggcat ggccctgatt ctcggtatct acgatgagcc 300
catgactcct ggccagtga atttggtcgt ggagaggctt ggcgactacc tggtcgaaca 360
cggtttctaa gcccgccctg atatgc 386

<210> 9305
 <211> 362
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-C11

<400> 9305

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ggaggagttc tcccccaatc cctcgttccc ctccgcccta cacgttctcg cccacgtcgc   60
cgccgccagc tcttccccct ttcgccggag ctcttttctc cggcagtaga gatggtgaaa  120
gacgcagtcc gctatgagcc tggaccggcg tttcaggaga gtggagagca gggcaagctt  180
gagataccag catctggctc cacagaatct tggctaatac agtggcctcg aaaccatgta  240
aatgcttctg attttaatgg tcaagaagtt tctcttaata agcatcatga cgatggaaac  300
ttgggaaatt tggagagttc ttcggggaaa tcatatgaac tcgttagctt tgctgctcaa  360
ca                                                                    362
  
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<210> 9306
 <211> 444
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-C5

<400> 9306

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ccaccatcgt cgccagcctc ggcacccccg cgccctcaa ctctctctcc ttccgccccca  120
agtcctcag gaacacccca gtccaggccg cgcccgctcg acccgcttg atggacgccg  180
ccgtggagcg cctcaagacc gggttcgaga agttcaagac cgaggtctac gacaagaagc  240
ccgatttctt cgagccccctc aaggccggcc aggcgccccaa gtacatggtg ttccgctgctg  300
ccgaactccg tgtgtgcccc tcggtcaccc tgggcctgga gcccggcgag gccttcacca  360
tccgcaacat cgccaacatg gtcccgtcct actgcaagaa caagtacgct ggtgttggtat  420
cggccatcga atacgccgtc tgtg                                                                    444
  
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<210> 9307
 <211> 357
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-C6

<400> 9307

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gatgcagcag ccaataaggc tcaagtagtc tttccttgta gaaatggtgt accattagca 120
actgttcttg gttccttttt tttcgtgct gcacggatga gaagttctct ttggcgttgt 180
tgagatgatt gtgtatatct tgtggccttt tgctcgtgca tgttgttcct caagtgtttt 240
ggacctactt tctgtaagtt ggtttttgca agtacatcta ataaaagagt atttttgcac 300
gtcaaagggtg catattttaa aaaaaaaaaa aactaaaaaa aaaaaaagcg gccgctc 357

<210> 9308

<211> 269

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-C8

<400> 9308

tgatcagcta agagtgggtg ccctgcctcg agttcagcat gggtggcttc gtctttcgtg 60
agcacaacag ctccccggg tactacgacg gccgatactg ggcaatgtgg tatctgcta 120
tgttcgggtg caccgacgcc acgcatgtgc tcaacgaggt ggaggaggtc attgaaggat 180
tatcctgacg cgtatgtccg cgatcatcgt ttcgacaacc tgcaccaggt gcacttcgtc 240
agcttcattg cattcaggcc acctggttg 269

<210> 9309

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-D12

<400> 9309

gacaacttac aaggcttgaa ggggagaaga gcagctcaa gaggtcgggc agcaaactg 60
gcattctgct gccacacag caccacatcc ctgcgtccc catgcaccac catcccaaac 120
tctggcttca ggcagaacca agtcacctc ttcacgacca gaagcagcag gaggagtaac 180
acgaggcatg gggcaaggac cttccaggtc tcatgcgcag ttgagcagcc aatagtgatt 240

ggcctggcag cagactcggg atgtgggaaa tccaccttca tgcgccggct cacaagcgtg 300
 tttggaggtg ctgcagagcc acccaagggc ggcaaccag actccaacac gctcatcagc 360
 gacacgacga cggtcatatg ccttgatg 388

<210> 9310
 <211> 437
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-001-Q1-E1-D6
 <400> 9310

tacggtacgg atgttccggg tcgactacct gatccgctcc aagtgggtgc cttgcctcga 60
 gttcagcaag gttgggttca tcttccgtga gcacaacgca tctcctgggt actacgatgg 120
 ccggtattgg acaatgtgga agctgcctat gttcgggtgc actgacgcca cacaggtgat 180
 caacgaggtg gaggaggtca agaaggagta ccctgacgcg tatgtccgca tcatcggatt 240
 cgacaacatg cgtcaggtgc agtgcgtcag cttcatcgcc ttcaagccac cgggctgcga 300
 ggagtccggc aaggcctaaa cagctcactc acgacaggcc atatataaag tgccattgca 360
 gttttgtcaa ctctgacatt gctttgggtt ttccttctcc atttatcttt catacttgtt 420
 cctaagaata tgtgtat 437

<210> 9311
 <211> 308
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-001-Q1-E1-D8
 <400> 9311

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 ctactatttc gtccacatca gagatgcctt agcgtcgatg acggttaaca tcatgtagga 180
 attggcctct gtggcatcca ccttcagatc ctgcttatca tgttttcacg aaacagcatg 240
 acgaggactt cgccaccact ctgccgcact acactttaca atgctgcggc attccggtac 300
 cagcagcc 308

<210> 9312
 <211> 338
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-E1

<400> 9312

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 ttattgcaat gttgggagac aactcaciaa ctcttccacg gtttcccaca ggcagctcta 180
 gactctcgga gtcgcatgtc acattggttg cattgggtcac ggcaagtatc gtcaggacac 240
 gcagcacggc gctaatttca caagtttgag cgtcattac aatgacgatt aggtcgggtcc 300
 cacacgcaca tgtgtcgtct ctatagtttc taggcact 338

<210> 9313
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-E7

<400> 9313

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 ctggaggagc cagcgagaac tctatcaggg ttgccaatg gatgcttcaa actcctgggtg 180
 caacaagtta catgggttgc attggaaagg acaagtatgg tgagcgagat gaagagcgcc 240
 gctaaagctg caggagttac tgctcattac tatgatgatg acgctgctcc tacaggcaca 300
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 tgctacaaat ctgagcatct aaagaatcca gagaactgcg cactagttga gatagcaata 420
 tacatctaca ttgctggctt ttt 443

<210> 9314
 <211> 399
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB29-001-Q1-E1-F1

<400> 9314

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ttcctcggcg cagcacaaag cagttcctgg ctcatcagtt caccaccggc attctgcagc 180
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gtttcctttg ctgggtggac tacttcaacc gcgttgtgc 399
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<210> 9315
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-F11

<400> 9315

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ttgggttcat cttccgtgag cacaacgcat cccctgggta ctatgatggc cggtactgga 120
caatgtggaa gctgcctatg ttccgggtgca ccgacgccac acaagtgatc aacgaggtgg 180
aggaggtcaa gaaggagtac cctgacgcgt atgtccgcat catcggattc gacaacatgc 240
gccaggtgca gtgcgtcagc ttcacgcct tcaagccacc gggctgcgag gagtccggca 300
aggcctaaac agctcactca cgacaggcca tatataaagt gccattgcag ttttgtcaac 360
tctgacattg ctttgggttt tccttctcca tttatctttc ttatttgttc ctaagaatat 420
gtgt 424
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<210> 9316
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-F3

<400> 9316

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ggaagatacc cttgcagaca ccgatacggg cgtcgcgggg gggagcccag tagaacttct 120
ccatacgacc atcacggatc agaggggctg acaacgctga gaaatcgta ccagtgcga 180
cgatgggcac acgtgggttc tcctccttgt tgtacatgcc tgggagctgc acattgggtgg 240
gggcatcggc gatgttcatt aggggtggcg tcaccatctg gttgttgacg gtgtactgtg 300
tgggtcccgcc catcctaccc gcaccggcgt caagatcggt gatgaagagg cgtcgacc 358

<210> 9317

<211> 457

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB29-001-Q1-E1-F6

<400> 9317

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gaggaaaaca aagcacctga tgcctctcag gaagcagatt ctgaggacac taatgagaag 180
gcacaagaag atgaaagcaa ggtagttgaa catcatgatg gagatatcac ggaccatgac 240
aatcactcac cagaaggcga gacatctgtt gaagtgcctg acattaaagc tgggactgga 300
gatgatgaac caccggtgga gacatctgca gtacctaccg aggagcagga ccctacttct 360
gtcaactctg aaggtttgtc anaggcggaa ttgggtcgtc tggtagcttc tcgctggact 420
ggagaaaatg tagatgatgt tggtaaaagc gataaaa 457

<210> 9318

<211> 328

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-F8

<400> 9318

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cagctggagg gagcttcgac gtgcagaacg acatgttccg cctgaactat ggctaaggaa 180
 gggcgaccgc tctggaggca ggcagcctgt tgagggattt atgttagcac agggaagatc 240
 aggtggatat gctgcaggag tcgttgggtg gtcggcagct tgtgcaggtt ggcgcaggcg 300
 gttgccacgg cttggggagg cagcgacg 328

<210> 9319
 <211> 395
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-001-Q1-E1-G1
 <400> 9319

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 cggggtacaa cgatgggccc gtaatgggac aaatgtggaa agctgcctat gttcgggtgc 120
 actgacgcca cacaggtgat caacgaggtg gaggaggtca agaaggagta ccctgacgcg 180
 tatgtccgca tcattcggatt cgacaacatg cgtcaggtgc agtgcgtcag cttcatcgcc 240
 ttcaagccac cgggctgcga agagtccggc aaggcctaaa cagctcactc acgacaggcc 300
 atatataaag tgccattgca gttttgtcaa ctctgacatt gctttggggtt ctccttctcc 360
 atttatcttt cttatttggt cccaagaata tgtgt 395

<210> 9320
 <211> 414
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-001-Q1-E1-G10
 <400> 9320

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 agcttgtgaa ctgcggggac ggaccagtga cctttgagca gccaaagatg acagtcgaga 180
 agctgcgaca gtacgggcac atgctcgtcc aggagcagga caatgtcaag cgtgtgcagc 240
 ttgctgacac ctacatgagc caggcagctc tgggtgatgc taatcaggat gcgatgaaga 300
 ctggttcctt ctacgggttag aacattctcc atacacacc accatctctt gctgcatatg 360

acgaggtaaa ggggcacagc aacgtacttt gcctgtgccg gcaggatgca ccga 414

<210> 9321

<211> 367

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-G5

<400> 9321

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ggctctatca ggtggtatca ggtttccacg atgcgcgggtg agattctaca gtgtttcctc 120
ggttacatcg actccgttcg gcatacctac agtccacacg ccggccacaa gggcaactac 180
ggctagtcca tcatagccga accgctcgga gccattgcac agtcgttcta gggttttact 240
ttggtgaatt tgcggttgca tcgtcgggtat agttgcgggt cttagcgtct agtcatttat 300
agtttcgagt tctggtcatg agttgtcacg cagtcgccgc accgatcatc atcgcccctg 360
ccagcta 367

<210> 9322

<211> 422

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB29-001-Q1-E1-G7

<400> 9322

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ccttcggcca aatccctgcc ttccaggatg gggatctgct tctcttcgag tcacgcgcaa 120
ttgcaaagta cgtgctccgc aagtacaaga agaacgaagt ggacctgctg aggggaaggca 180
acctgaagga agcggcaatg gtggacgtat ggacggaggt ggacacgcac acctacaacc 240
cggccatctc gccgatcgtg tacgagagcc tcatcaaccc gctcatgcgc ggccctgccga 300
ccaaccatac ggtggtggac gagagcctgg agaagctcaa gaagggtgctg gatgtctacg 360
acgcgcgggt gtccaatcac gagtaccccg ctggggactt cntcagcttc gcggacctca 420
ac 422

<210> 9323
 <211> 427
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-G9

<400> 9323

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aggtaccgat ctacgaattc gcgactcgac attgtgacaa aaaagagcgg cacctcttat   60
tgattgtgtg tgtgtgtgtg ttgaggaggg gcgattcaaa tcagtggggt gaacttgtgg  120
tagtgctgtg tatgtatttt caaccataaa taggtaggga atggtagaaa aatgtgatat  180
aaagtgagag agaagtggac aacaagagag aataagataa tggatgatgca agtcagagaa  240
tcggaactat gcaacatgca aaatcacaaa aaagagggga aattatttcg aaaaaggga   300
aaaagggtgc aatggccata tgaatggtgc cctaccgcat gggttaaagt tctcaatggc  360
acaatggaaa cacctcgtgg tgcagagtcc cacatatgtg tgtttagcca taatataagt  420
agataga                                           427
  
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<210> 9324
 <211> 457
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB29-001-Q1-E1-H1

<400> 9324

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ccattctcgc cgaggacaag cacttgccca tgtacgatga gttgtccagc aaggaaaatg  120
ttgaatacat tgctggagga gccacgcaga actctatcag ggttgcccaa tggatgcttc  180
aaactcctgg tgcaacaagt tacatgggtt gcattggaaa ggacaagtat ggtgaggaga  240
tgaagagcgc cgctaaagct gcaggagtta ctgctcatta ctatgaggat gaggctgctc  300
ctacaggcac atgtgctgta tgtgttgttg gtggcgaaag gtcattgatt gcaaacttat  360
ctgctgcgaa ctgtacaaa tctgagcatc taaagaagcc agagaactgg gcactagtgt  420
agaaagcana atacatctac attgctggct ttttcct                                           457
  
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<210> 9325
 <211> 407
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-H2

<400> 9325

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 agcaccgaac tggatgtgtc gtcggttgca tgaggaagtt gcagaaatgg tgcctgtctt 120
 cggctcttoga tgagtaccag cgcttcgccg ctgcgaaagt gaggagcacc gacctgagat 180
 tcatggagct gttcgacgtc tcgagcttga agcacctgac caactcacat tgtaaccca 240
 gggcgagtga tcgctcgccc ccgacgtcct cccagattct agtacatctc catgctgtcc 300
 tccggcggtc actgaaccga atcagcagtg aataactttt ggaacccgta gaatgaatcc 360
 atgagatagt ggcgagacct ctgcataaaa taagattgaa gaagaac 407

<210> 9326
 <211> 275
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-H5

<400> 9326

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 ccactgtccg atatacctct ggtattctgt gcactgccct tgaactgtcc aatggtcatg 120
 acatagatgt aactctgtg ccagcagggt tgcttcaaag atttgtcaga ctactcgggtg 180
 ctggagatac cgaggttcct tacgtccttg atgctctagc aaggaaattg cgagcgccac 240
 ggcggcctca ggatgcgctc gtcattacaa ctatg 275

<210> 9327
 <211> 460
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-H6

<400> 9327

cccggctcga ctacctgatc cgctccaagt gggcgccctg cctcgagttc agcaagggtg 60

gcttgcgtt cctgagcac aacagctccc ccgggtacta cgacggtcga tactggacaa 120
 tgtggaagct gcccatgttt ggggtgcaccg acgccacaca ggtgctcaac gaggtggagg 180
 aggtcaagaa ggagtaccct gacgcctatg tccgtgtcat cggcttcgac aacctgcgcc 240
 aggtgcagtg cgtcagcttc atcgcttca gggcaccggg ttgcgaggag tccggcaagg 300
 cctaaactac gagttgaaac aatggcctat ctcgatgaa ggtcttttgt gaacttcact 360
 tttgtccaca actctgctgc acgactctgc tttcggaccg gatcatacct tttgttctat 420
 atgatttgtg tacgtatgta cgaacatagg ttcttgagca 460

<210> 9328
 <211> 412
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-H7

<400> 9328

acagcgagta tgatttagct acccatgcat gcaactattg gatatgtgat ggaatcatac 60
 agaaagacac agacattgct gaagcatggc aagttgggtga gagactgcaa ggtgatatcc 120
 gatggaatat ggactaccgc gacaatgaat ttccctctcg ctttctatgg tatgccgagt 180
 gcgtaccaca ctgggcatca ccagctcatg gatttgtgct ggtccctgat ggagtcgttc 240
 ctagcagaac gttccagcat ttgacaagc ttggcgtgat gaaactctca aggtgtagct 300
 tcagcttttc atcacctcca tttctctgct gccacagcct tagattttta tggcttgacc 360
 actgtcaaaa cctaggaaag agaaatgggg cgcaatttgg agaagaggac ac 412

<210> 9329
 <211> 359
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB29-002-Q1-E1-A3

<400> 9329

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tcgagatggg tggctgcaaa gctccaatta ccaccttcat agttgagccg tttgtccccc 180
acgatcaaga gtactacctt tcagtttgtt ccgaaagggt gggtagcacc attagcttct 240
cggaatgtgg aggcattgaa atcgaggaga actgggacaa ggtaagaca gtctttcttc 300
cgactgagaa gccaatgaca cctgatgctt gtgctnccct tgattgcaac cttccactg 359

<210> 9330
<211> 441
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-A4
<400> 9330

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gagcaaaaga tggcattctc tctgcccggt tgctgaccat cttcgctctg atgctccctc 120
atccactcct ggatgaaaaa aactgcatta cataaaggag tacaatcgcc agcgttactc 180
gtactaattt gcatcacaca gcctatcttg aaaataagtt caaatatcta tatgggagaa 240
agtcatgtac gtgtactatg aaaaagtttg tgtacgaaat tgctgatgac attattatcg 300
atgtgttcat ttatataaca cacatagaga gttaatagca tatagatcct tcaaaaatag 360
taggggtcca tttggacaaa caacgggtat tcgcaaaata gtttaacagg ataatgaaaa 420
aagttaacag ttctcacaag a 441

<210> 9331
<211> 445
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB29-002-Q1-E1-A5
<400> 9331

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ctcatggtca taaaaatcct atcattaatt caagtgtct cccgatatat atcccatga 120
tggagtacac tagtataaat aattgttcta tgccaatcaa caacgttgag tggctcgtga 180
accaccggca gagtcgttcc aagtgttaat tatttccagt tctccctcca ttgcacaca 240
tagctccact acttctctat tatcggatgt aataatgatg cttagtctgt gatatgcttg 300

atagtgtgcg tctttgcata ctacgtgaca tgtctctagc angcaggcat gttggaacat 360
gacaatatgg agacatagtc cagagcattt gcctttgtac ttcaatatca gacgttgtca 420
ataattgggc atctaccttt tttccc 445

<210> 9332
<211> 422
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-A6
<400> 9332

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tgtatatgaa aaaaagattg attgaacttt ccaacggact cattcgatga gtaaacgatt 120
gaatgggatt cgcttgggca acgaaatcaa gtcctggtcc ccttttctct cttattgaat 180
taactaattc atttcctttt tacttttggg tttttttttg atttgatttg gcattattca 240
acaataaaaa aagaaaaatt tcgacaaatt cccttttttt aattatgtga taattatgag 300
aaccaatcct actacttctc ctgcgggggc ttccacaatt gaagaaaaaa gtacaggctcg 360
tatcgatcaa attattggac ccgtgctgga tgtcactttt cccccaggca agttacctta 420
ta 422

<210> 9333
<211> 423
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-B1
<400> 9333

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ggccgacgac cccgaggcat ttgcggagct caaggttaag gagatcaaga atggccgcct 120
cgccatgttc tccatgtttg gcttctttgt gcaggccatt gtcaccggca agggccatt 180
ggcgaacctt gccgaccaca ttgctgacct tgtcaacaac aacgcgtggg cattcgccac 240
caacttcgcy ccggggaagt aagacatgaa tgatggttgg gagttgtatg tgagtgtcag 300
ttgaattgta acaccaacat gttaaataatg agaattgtgt gcaaagacat tgtttgattg 360

gtccaaaacg aggcaacaaa acacatctaa atcggcataa aaccaaaaaa aagcgggcg 420
tct 423

<210> 9334
<211> 408
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-B10

<400> 9334

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gagagggttcg agaatgaagc cgctgagatg aacaagaggt ctttcaagta cacgtgggtg 120
cttgacaagc tcaaggccga gcgtgagaga ggtatcacca tcgatattgc tctctggaag 180
ttcgagacca ccaagtacta ctgcaccgtc attgatgctc ctggtcaccg tgacttcatc 240
aagatcatga tcaccggtac ctcccaggct gactgtgctg ttctcatcat cgactccacc 300
actggtggtt ttgaggctgg tatctccaag gatggtcaga cacgtgagca cgccctcctt 360
gctttcactc ttggagttaa gcagatgatc tgctgctgca agaagatg 408

<210> 9335
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-B3

<400> 9335

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ccaattacca ttttgacaga ccaagccagg gcaatggagg tcgctattgc ggacgtatat 120
ccagatgcga cacacagatg gtgcaagtgg cacatcctca agaaggccaa agagagcctg 180
gggtctaatt acaccaagaa gtctgatttc agggcagaat ttcacaagct ggttcacgaa 240
atgctcacta tcgaggagtt tgaggacggg tgggcagcgt tgcttgagaa gtattcactg 300
aagaataaca catacctgat gcaaatttac aagacaagac agaaatgggc caagccatac 360
tttgcaggga aattctgtgc gaggcaaacc agcaacggga ggagtgagag cgcaaatac 420
atgttgaaat 430

<210> 9336
 <211> 393
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-B4

<400> 9336

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 ccgagcaacg ctccatcttc cagcatcgac cctcaagaca ccgcagcact ggaagactgg 180
 gcaacgaccc ggattcaaaa cgcgtttcag cgccacaaag caacgaggac gctccgttgc 240
 ctgaagcgac ttcaaccact gagcattggt gggcacagca atcgagttac cagccagacc 300
 agtgccacac tgaactccat aaattcggtc cacaagtcta aggctgagcc tacacaacgg 360
 cgtgccttca tcgtccccga tgggctcaac acg 393

<210> 9337
 <211> 383
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-B5

<400> 9337

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 cagagatgaa ggccaccgat gttgcatccc cagattcgga cggaagctga gtacctatcg 120
 agcaatattt tcaggaagtt ctgcatggcg ctcgtttaat agagacgcag tgcttgaagg 180
 atattatggt cgaataacat gtattattgt gaaacaatgt ttcgatgtaa tataaaagct 240
 ttttatactt gtgccttcaa gaattaaaat acctcctgtg cggacgttaa tgtatatgtg 300
 tatataaccc gactgatggc agtcttcggc ttcagcccc acgcatataa tgccgggggt 360
 gtatggcaaa atgtgcattt tca 383

<210> 9338
 <211> 464
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB29-002-Q1-E1-B6

<400> 9338

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ggaagctgcc tatgttcggg tgcaccgacg ccacacaggt gctcaacgag gtggaggagg 180
tcaagaagga gtaccctgat gcctatgtcc gcgtcatcgg cttcgacaac atgcgccagg 240
tgcaatgcgt cagcttcatt gccttcaggc caccaggctg cgaggaatcc ggcaaggcct 300
aaagtgcaag ttgaagtaac cgatatacat gtcattgttag tcacatttgt cggcggctct 360
gctttctcag ttttacttct cgttctactc atatgtgaat atatgagcat atgtatgtaa 420
gcacttacca atgtaggctg angaggatgc atatgagaga tata 464

<210> 9339
<211> 312
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-B7

<400> 9339

cccgggccga caccttccca gaacaatcca tcgacttttt cggtgctctg cgtgctcggg 60
tgtacgacga cgacgtgcgc acgtgggtga cctctaccgg tatcgagaac attgtgaaca 120
agctggggaa ctgcggggac ggaccattga cctttgagca gccaaagatg acagtggaga 180
agctgctaca gtaccggcac atgctcgtcc attagcacga caatcgtaag cgtgtgcatc 240
ttgctgacac ctacatgagc caggcagctc tgggtgatgc gaaccaggat gcaatgtgga 300
ctggtgactt ct 312

<210> 9340
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-C1

<400> 9340

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gctcatggac gdatcaatcc ttacatgtcc aaccttgcc acattgagct gatcttgtca 120
gagaaggaag agccagtga gaaggaggct gacaacgtcg tcgcaccaag gaaagctatc 180
taagctaacg gagtggctgc attcgtccaa gaatcttagt tgtagttctt ctcaagtacc 240
tttgttggca gtgtttgttg cctccttgat gtttttgta ccaacatgga gtaaggattt 300
gttaaggttg atgttatcct tgtgattgag agtgggtcctt atatgctaaa acagtttcag 360
atatttgagc agtagccac cagaacttat ttctcagaga tgctggacct ttccggctgt 420
tcgagtatta tatccacttt ttg 443

<210> 9341
<211> 421
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-C4
<400> 9341

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acttatatgg agtcattcat cataggcagt atggcccaaa aggtgggcac tattggtgct 180
tcaccaagta taatggagaa tggtagcaga tcaatgacga acgggttaca tctatcacta 240
aggaggggtg agaaaagaaa acaaagaaag ttatatcttt ttctataaaa tgaaaatggg 300
agaacattct gaaccacatg gcgagcgtgc aactgaagac gacatcccaa gacggacgga 360
cgctgatccc ttacttttca ggccccacc tgatgaagat acccccaggc tatctgataa 420
g 421

<210> 9342
<211> 298
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-C5
<400> 9342

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cgcgagagaaa tctcgtcggg ttgttccccg aattccagcg caaagatgcc gcgcattccc 120
atgatcagat tccccagag gcattctaaa gtcccatccc caccagcggc gcagcctgca 180
gatcagcagc cgaccctcat gtcccgattg ggagctaaag tagaggcacc atcttctgga 240
gagaaaaaga attaccggtt cagatcagat gtgccttccg caccttctca taatgctg 298

<210> 9343

<211> 480

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-C6

<400> 9343

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ttgaagaaag gtggaaacag gttcatcaag accgctgctt atggtcactt tggccgcgat 180
gatgccgact tcacctggga ggtggtgaag cccctcaagt tcgacaaggc atctgcctaa 240
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ggatcctttt gtccttggga agtaagaaga agcattcgac atcaccgga cgtgctacac 360
tggtcgtgcc gtctagtcat cagtgcctaa ttttcttact ggtgtatcat ttcatatatt 420
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<210> 9344

<211> 462

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-C8

<400> 9344

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ttagtttgtc ttggcttcat gccgtggtct ggcgttatgc cgtggggatg caaaccactg 180
gagctctcga gcggcgtctg gtggtggcct ccgtcgtttt ctttcttgcc accatggtgg 240
tggaagtgg aagacgccg atctggcaag atccccctga ataagctcgt tctggtgttg 300

tggtgttccc tgatctggag ggcattccaac tgctactgct tgttttctca ggctaccatg 360
 gtggtggatg agaagcagga tagttgcaga atcctgaagt ttataggctg agttcgagca 420
 tatcagcaga ggtccctttg gtggagcgac gggcgccatc ga 462

<210> 9345
 <211> 457
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-C9

<400> 9345

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 ccacatcgct caatacaaag aggcttgatg atgatacaga gaatcttgct catgagcgtg 120
 tgccgtcaga cctgaagaag agcattatgc aggctagaac ggacaagaag ctacacacagg 180
 cacagcttgc acagctgatc aatgagaagc cacaagtcac ccaggagtac gagtcaggca 240
 aggctatccc aaaccaacag atcatcggca agctggaaag ggctcttggc acaaagctgc 300
 gaggcaagaa gtgaagctgc gtgcatctga caggagtcga gtctttcaag agaggagctt 360
 ggctgggcaa gtttaccgct aaataaagct tgtctactaa atcatgcgac ttaagaaaac 420
 cctggagttt ggtatttcgc tttggtttgg gtgaatg 457

<210> 9346
 <211> 385
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-D2

<400> 9346

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 agcaccgtcg caaccatcat cggcaagccg gagaactatg tgatggttgt tctcaagggc 120
 tcagtgccca tggcgttcgg aggtaccag gagcctgcag cctacgggtga gctggtttcc 180
 atcggagggc tgaacctga tgtgaacaag aagctgagtg ccggcattgc ttccatcctg 240
 gagtcaaagc tgtccatccc caagtccgc ttctacctca agttccatga ttcaaagcgc 300
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385

<210> 9347

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-D8

<400> 9347

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gcatggatgc caaggcgta atgaacgatt acttcattgg ggagttggac ttggacgaag 180
cacctgacat gcctgagatg gaggttttca ggaaagagca ggacaaggac ttcgccagca 240
agctggtgga ttacgctgtg cagtactggg ccattccggt agcagcagcc gggatatcag 300
ccgtggttgc catattgtat gcacggagga agtgatgact ggctatacgt tgattgaaga 360
accatttttg ggtaacacac acatttatag cctgttatgg atggagaaat tatgtacttc 420
ggtccaa 427

<210> 9348

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-D9

<400> 9348

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gaaggccgag cgtgagaggg gtatcaccat tgatattgcc ctgtggaagt tcgagaccac 180
caagtactac tgcaccgtca ttgatgcccc tggtcaccgt gacttcatca agaacatgat 240
tactggtacc tcccaggctg actgtgctgt gctcatcatt gactccacca ctggtggttt 300
tgaggctggt atctccaagg atggccagac ccgtgagcac gccctccttg ctttactct 360
tggagtgaag cagatgatct gctgctgcaa caagatggat gccaccactc ctaagtactc 420
gaaggctcgt tatgaggaaa 440

<210> 9349
 <211> 197
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-E10

<400> 9349

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 tcgcggggagc gatcagtcac ctttgagcat ctatagtcga caggctagaa actgctacag 180
 tagtggcata tgcacgt 197

<210> 9350
 <211> 420
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-E5

<400> 9350

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 tgcagatctt tgtgaagaca ctgacgggca agaccatcac ccttgagggtg gagtcgtctg 180
 acaccatcga caatgtcaag gccaaagatcc aggacaagga gggcattccc cctgaccagc 240
 agcgtctcat ctttgtctggc aagcagctgg aggatggccg aaccctcgct gactacaaca 300
 tccagaagga gtccaccccc caccttgctc tgcgtctgcy tgggtggcatg cagatcttcg 360
 tgaaaaacct caccgggcaa gaacatcact cctggagggtt gagagctctg acaacatcga 420

<210> 9351
 <211> 348
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-E8

<400> 9351

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 tggggccatca cagataggat gtcattggag ttttgtgttg acttcattcc tgaccttaag 180
 aagatatagt ctccctaaat cgtggtatga agggagactg actggaaacg gcacgcttgg 240
 tggggactca tcaatatgca cggaccgcta ttcttgatcg catccagaca agacagttct 300
 acacaactct aacttggcga ccccatatct ccattgccac aatatcag 348

<210> 9352
 <211> 420
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-F1

<400> 9352

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 aatgctgtga tttttggccc tgacgatagc ccctgggacg gaggtacgtt taagctgact 180
 ctccagtta atgaagaata tcctaataag ccaccaacag ttcggtttat ttctcggatg 240
 tttcaccta acatttatgc tgatggaagc atatgcttag atatcctaca gaatcagtgg 300
 agcccaatat atgatgtagc tgctatacgt acatctatcc aatcgctgct gtgtgatcct 360
 aaccgaatt cgcctgctaa ctcagaagct gcccgcatgt tcagtgagaa caagcgagag 420

<210> 9353
 <211> 191
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-F6

<400> 9353

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 tctaattgtt cgtcgctgtc atattgatcg ggacatgtca tcgaaggggt ggcttgcaaa 120
 tttggttcga gtgagtttgt tcacattatc gtcagtgtt gaagttacgc gactgggtgc 180
 attcgaccat g 191

<210> 9354

<211> 350
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-F7

<400> 9354

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 aatgagagtg caagttcctg agaacaagcg acgtgagtct acattgaagg gcatcgatcat 120
 agcacggcgc aatgctggga tcgctacgac tttcagattg cgtagattac tagctggcgt 180
 tggcgttgag tctgtctttc cactgtactc gccaaatatt aaagaaatta agatcttaga 240
 caggtagaga gtcaggatag caaagctgta ttacctgatg gacagaatga ttgcactgat 300
 gaaatgagac accatcagct tggttcttgc cattttgttt ctgatgtgga 350

<210> 9355
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-G1

<400> 9355

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 ggaggacaag gagatgcaca tctctctcta cgctgctcg aattgccagc accaggagat 180
 tgctactgat tcttgtgtgt acaaaagggg tcttcggaaa tctgctgatg aacctaaga 240
 caccctaaaa gacgcagctg ctgatgcgtc tctgccacgc accagaagtg ttaaatgcta 300
 caactgtagc tatccagaag ctgcttattt ccaggccccg acgacaggag aggttggcct 360
 gacgctatac ttcattctgt gcagccctac ctgtggccac aggtgggtgg actgactgac 420
 tgacaagggg gaaccctcca 440

<210> 9356
 <211> 421
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-G11

<400> 9356

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aattgactta ctacacccca gagtatgaaa ctaaggatac tgatatcttg gcagcattcc 180
gagtaagtcc tcagcctggg gttccgcccg aagaagcagg ggctgcagta gctgccgaat 240
cttctactgg tacatggaca actgtttgga ctgatggact taccagtctt gatcgttaca 300
aaggacgatg ctatcacatc gagcctgttg ctggggaaga cagccaatgg atctgttatg 360
tagcttatcc attagacctt tttgaagagg gttccgttac taacatgttt acttccattg 420
t 421

<210> 9357

<211> 297

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-G7

<400> 9357

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aagaaattca acgaaggcat catgcgagac atactggacc cgctgctgga agatcgcgctg 120
gacgaagacg tgttggaaga agcttcagac tgtgggggttc cagtgcgacc ctctcacaca 180
ggacgaccgt ctcacggtaa ccgaggtcct ggagcagctg tgggacatca ggaaaggcga 240
tcggatgcgc ttcaggatcg catccaatca tttgctcatt taatcacgac cagtgca 297

<210> 9358

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-G9

<400> 9358

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ctcgcggaat acgtgtggca gcagaggccg cgcttctcct gctccagagt tgctcgagctt 120
ggtgcaggaa cctcgctgcc aggtatagta gctgcaaaag ttggagcagg tgttacgctg 180

acagacattg cacataatac agaagtgctg gacaacatca agcaagtatg cggcctcaat 240
aatgtgaact gtattaggac ttacttgggg agattgggat gaacctgttc ttgatttgca 300
ccctgatatt attctcggag ccgatgtgct ttatgattca gcaaaatttg atgatctctt 360
cgcaatgggt accttcctgc tgggaaattc tctgtggca gtgttcatca ccacataaca 420
gaatcgcagt ggtcatcact tga 443

<210> 9359
<211> 365
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-H11
<400> 9359

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tgctcgggtg tacgacgacg aggtgcgcaa gtgggtgacc tctaccggta tcgagaacat 120
tggcaagaag ctggtgaact cgcgggacgg accagtgacc tttgtgcaac caaagctgac 180
agtggagaag ctgctagagt acgggcacat gctcgtccat gagcaggaca atgtcaagcg 240
tgtgcagctt gctgacactt acatgagcca ggcagctctg ggtgatgcta accagtatgc 300
gcataagact ggtaccttct acggttagaa cattctccat acacaatcac catctcttgc 360
tgcatt 365

<210> 9360
<211> 375
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-H2
<400> 9360

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caccatcgtc gccagcctcg gcacccccgc gccctccaac tctcctcct tccgccccaa 120
gctcatcagg aacaccccag tccaggccgc gcccgtcgca cccgcattga tggacgccgc 180
cgtggagcgc ctcaagaccg ggttcgagaa gttcaagacc gaggtctacg acaagaagcc 240
cgattttctt gagccccctca aggcgggcca ggcgcccaag tacatggtgt tcgcgtgcgc 300

cgactcgcgt gtgtgccct cggtcaccct gggcctggag cccggcgagg ccttcacat 360
ccgcaacatc gccaa 375

<210> 9361
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-H4

<400> 9361

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gttcagcaca aggcaccccc tgggtactac gatggccggt actggacaat gtggaagctg 120
cctatgttcg ggtgcaccga cgccacacag gtgatcaacg acgtggaaga ggtcaacaag 180
gagtaccctg acgcgtacgt ccgcatcatc ggattcgaca acatgcgcca cgtgcagtgc 240
gtcagcttca tcgccttcac gccaccgggc tgctacgagt ccggcaaggc cgacacagct 300
cactcatcac cggccacata taaag 325

<210> 9362
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-H6

<400> 9362

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catcttccgt gagcacaacg catcccctgg gtactacgat ggccggtact ggacaatgtg 120
gaagctgcct atgttcgggt gcaccgacgc cacacaggtg atcaacgagg tggaagaggt 180
caagaaggag taccctgacg cgtacgtccg catcatcggc ttcgacaaca tgcgccaggt 240
gcactgcgtc agcatcatcg ccttcaagcc accgtgctgc gaggagtccg gcaacgccta 300
aacagctcac tcaccacgga ccacatataa agtgccattg ctgttttgtc acctctgaca 360
ttgcctttgg gttttccttc tccattttat c 391

<210> 9363
<211> 438
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-A10

<400> 9363

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aggtaccagt caggaattcc cgggctcgac tccaagataa agctggtgaa ttgccgaaat   60
tagtagagga tcttcgccag acgtcgatta gcacagggcc tcgaggtgcc tttaggatgg  120
cgcaagggat ccaagctctc cttgggggttg gcggggagtg gctaaatgac ttctcgaaga  180
cagctaacac gtcagaagga attccagctc agatgcgtct tggtttgctt tcccctcttt  240
acctcagaag gctttttgaa cgcattgggtg caacttatat caagctaggt cagttcatag  300
cgtctgcacc aacttccttt cctgcagaat atgttgaaga attccagaac tgttttgacc  360
gagcaccacc tgttccttat agcgagatcg agtcgatatt gcgtgaggag ttgcagcggc  420
cattggatag tgtctatg                                     438
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<210> 9364

<211> 352

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-A11

<400> 9364

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agataaccat gtatggtata tgtggatgat atggccaatg gcatggctat caatggtact  120
agcatgggtt tatggatcat ctgcgtttgt cgtcgaaagt ctcaagctga agaagatcat  180
gatgcaaaca tggctgatac caagatacaa cttccagtac agcctgatta gggagagggg  240
atccatcaat acgttaattg agcaggcaat atcagatgcg gatcaaagag gggtaaagt  300
gctcagtctt ggacttttca gtcaggaaag acgactcaat ggaagtgggtg aa         352
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<210> 9365

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-A12

<400> 9365

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 aaagcagggg gttctgctcc gtccggcgct tcgcaggaga tagcgctgcc gtcgaggagc 120
 cggagaatgg acttgccgca ggcgatctgc aggtatctgt gcactcgtat gttgtggtac 180
 atacagtagg acggccgctt ctagacatgt gtgttctaca gaattgtcta gtagtggtac 240
 gtagtaccat gaatatttag gatgctctgg ttttgaagat tacattatat tttccgcaaa 300
 aaaaaattac attatatcta tatatatatg caacagggaa ggtaagcaga taacaaccat 360
 tcaggatgct ggcctacga tcatgtgatc tttctccttg attaaagaaa atttagtgga 420
 tatcatcgtg attctcact 439

<210> 9366
 <211> 378
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-A2

<400> 9366

ggtccggatt cacgggtcga catggcgacg gtcagaagag agaacctgag gcgcctcttc 60
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 cacgtaaagt gaccctgtgc tcggctcggc gctgcgcaa ttgttcatca gttgggtact 180
 gctagtgtcg tagacattac caattgttcg tcagtggggg gctgctagtg ctgtaggcat 240
 tgccggttgt tcatctgtgt getgctgcta atgtttaga catttctgga gccccgggcg 300
 ctggctgcct cgagcttatg aacgctccga gcagttcgcc ggggaagctc tgtatgtatg 360
 tgacgtactc ctatatat 378

<210> 9367
 <211> 410
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-A6

<400> 9367

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agaatacaga ttcttggtac catcaatgct aatctgcccc cttaaacttg aaaggcaaatt 180
agctaattcc aacagcatca gaggagaagg ggcagctcaa acttttaaatt gcgaaggcgc 240
taccggcgat gttctttgtc gagggcatac cggcagtaac atcttcttcg atgccacatt 300
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ttgcaagaag ccagtaatcc tcgccagcat cactaatttc ccaaccaatc 410

<210> 9368
<211> 410
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB29-001-Q1-E1-A9

<400> 9368

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agatcgtgcg catccccgag gcgggtctcc tcaagttgat caaggaggcg gctttccctc 180
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agattgaagc atcctttggc gtcgaggcca ccgagctgta ccccgaccta aagtacacca 300
ctatcgacga gtatctcgag caccttcact gacagctttt ggctggctgg aatggcacca 360
tccacagtcg gcatcaacaa tcangatgat gaacagggtgg atcctccaaa 410

<210> 9369
<211> 376
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-B1

<400> 9369

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cttgacaagc tgaaggccga gcgtgagagg ggtatcacca ttgatattgc cctgtggaag 180
ttcgagacca ccgagtacta ctgcaccgtc attgatgctc ctggtcaccg tgacttcata 240
aagaacatga ttactggtac ctcccaggct gactgtgctg tgctcatcat tgactccacc 300

actggtgggtt ttgaggctgg tatctccaag gatggccaga cccgtgagca tgccttcctt 360
gctttcactc ttggag 376

<210> 9370
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-B10

<400> 9370

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cataatttac aagaacattc tgtactatta gtaagaggag gaaggggttaa ggatttacct 180
ggtgtgagat atcg cattat tcgaggaacc ctagatgctg tcgcagtaaa gaatcgtaaa 240
caagggcggtt ctaa atatgg ggtcaaaaag ccaaaagaat aagtgatttt agcccttata 300
aaaagaaaac ggattcttga acctctttca cgcctatgct acgtcgaggt actgcagaac 360
aaagaactgc aaaatccgat ccaatttttc gtaatcgatt agttaacatg gtgggtaacc 420
gtatta 426

<210> 9371
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-B12

<400> 9371

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taccatgctt tcttggcatc agaggccata atcaagcaga tccctcgtct ccttggccct 180
ggtcttaaca aggcaggcaa gtttcccact ctgggttagtc accaggaatc tcttgaagcc 240
aagggtcaacg agacaaaagc tacagtcaag ttccagctaa agaagggttct ttgcatgggt 300
gttgctgtag gcaacttgct gatggacgag aagcagatcc aacaaaacat ccaaatgagc 360
gtcaacttcc ttgtgtccct cctgaagaag aattggcaga atgtgaggtg cctgtacgtg 420

aagagcacca tggggaa

437

<210> 9372

<211> 419

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB29-001-Q1-E1-B2

<400> 9372

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gcgatgaaga ctggttcctt ctacggttag aacattctcc atacacaccc accatctctt 360
gctgcatang angaggtaaa cgggcacagc aagggtacttt gcctgtaccg gcaggatgc 419

<210> 9373

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-B6

<400> 9373

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gtcctcgca catgagatgt gttctggttg gatccacctc ggtttagtaa ctttgccaac 120
ccaaagtcag tgatcttagg ctcaaagttt tgggtccaaga gtatattctc gggtttcaca 180
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cctaatacaa tattgaaccg ttgcttcag tccagcaaga tgatgctttt atcaccgaac 300
aaaatgctag caagtgagcc gttctcgaca tattcacaaa ccaacagcct gtgagatcct 360
tccgaacaaa acccccatat tctcaccaga ttcatgtggt aaatcctagc aatcacactc 420
agctcggct 429

<210> 9374
 <211> 428
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB29-001-Q1-E1-B9

 <400> 9374

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gtgcccttct attcacgact gttggaaatg acttgacatt tcaaccaaac cctaactctg   180
tgtatcagac tgaacacctc tcatatttca aatttgttgg acgagtgggt ggaaaagcgc   240
tctttgatgc ccaacttttg gatgtccatt tcaactagatc tttctacaag cacatacttg   300
gtgccaaggt tacttaccat gatattgaag ccattgatcc tgcttactac agaaacctta   360
agtggatgct tgagaatgac ataagtgatg tcctggactt cacatttagc atggatgcag   420
atgaagag                                         428
  
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<210> 9375
 <211> 439
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB29-001-Q1-E1-C10

 <400> 9375

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gtaccgatca cgaattcccg gctcgacaaa ctaatcaaatt ctatcaactg ttggtaccca   60
ggatgcctgc attttgcaaa tgtcagtgga tcctgaagcc agaaacaagc aagagctaac   120
agctcatgtt ttatcacctc aacatgtata ggagaatttg gcagcaacaa ctgatggaca   180
gattgatgag acaatacgtc ttaaaactat cagaacccgc agtccagtag aggctgcgcc   240
ggttaacagt gcaagtcaaa aggttaatga ggcaccgaaa ccaaagatg aaatgacgat   300
tggagtgggt caagagcaca ggaaggggtg gaagacagag tcttgtcaag gagtaaaaca   360
aggcatgggt gatgtagatg ttgtcacgga ggaatcatca ccagtgcgca cgctaaaatt   420
gggaaatgca tgcagcgca                                         439
  
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<210> 9376

<211> 440
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB29-001-Q1-E1-C12

 <400> 9376

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aaagacggga cacctttgcc tctatcaagt ggtatcagat ttccagggtg ctcggtgaga  120
ttttacagtt tttcgtagtt tagatcgagt ctgttcttca tacctatagt ccacgaaaaa  180
gccaagaaaa attaggggtta gttcatccca tccgaaccaa tctgagcctt gcataatctt  240
ttctgtattt gcttggttga atttgcggtt gcatcgctgt gttcagttgc tggctcttagc  300
gtctagtctt ttagagtttc gagttctggt cacaagttgt cacgccgtcg ccgcacgac  360
atcatcgccc ctgccatcta cgaccaccgc tccgaatccg tatccatata ccaccaccag  420
tccgtgtcca tataaccacca                                         440
  
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<210> 9377
 <211> 476
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB29-001-Q1-E1-C2

 <400> 9377

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gttgaatata ttgctggagg agccacgcag aactctatca gggttgcccc atggatgctt  180
caaactcctg gtgcaacaag ttacatgggt tgcattggaa aggacaagta tggtgaggag  240
atgaagagcg ccgctaaagc tgcaggagtt actgctcatt actatgagga tgaggctgct  300
cctacaggca catgtgctgt ctgtgttggt ggtggcgaaa ggtcattgat tgcaaactta  360
tctgctgcga actgctacan atctgagcat ctaaagaggc canagaactg ggcactagtt  420
tgagaaagcg agatacatct acattgctgg ctttttcctt acggtgtccc ctgaat     476
  
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<210> 9378
 <211> 475

<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-C3

<400> 9378

gtccggagtt atcgggtcga cgagccctgc aaaataggta gaggtgaaaa agctggacaa 60
ctgggcactc tttgtagggg ctgatgtgag gagcccgccg ttttcttgct tgagcccaga 120
gaagtgggga ggaacgagca accgcctgta ctatgcccat tactctcagc cttggagcgt 180
acatggcttt ggtgacgcgg cagatgctgt gtgggatcct tccaccgacc ctgatcttgt 240
gtacaagaga aactggtacg gccagcttca ggccttctgg gtgtatccaa gcatgttcta 300
ctctgatggc cagtgatagt cgatgggcaa ctatggcttg ctgcactacc agcttctttt 360
ggaaaaacta tctcttccaa cagagactta tgcagctgaa gaaaagaagt gattttcatg 420
gtggcagtcg tactggagct tctgcagtta gtttcatcct tcagttttta gaaca 475

<210> 9379
<211> 452
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB29-001-Q1-E1-C4

<400> 9379

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gttcatggga gtcctaaaga aatatgtccg taaccgtgct aggccagaag gaagcatctc 120
catgggccat caaactgagg atgtcatcgg gttttgtgtt gacttcattc ctggccttaa 180
gaagataggt ttccctaaat cgcggtatga ggggtgactg gctggaaaag gcacgcttgg 240
aagggactca ataatatgca gggacggata ttcttggctt caagcacgct acacagttct 300
atagaactct accttggtga ccccgatatgt cgatgaacac aagaacagtc tgcgctccaa 360
acaccggag tagtgcgacg actggattac atgtgaacac atcaggactt tcagcagttg 420
gttggaaca cgtatcanag gtgacaacac tg 452

<210> 9380
<211> 444
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-C7

<400> 9380

gggtcgacgc cttcatggct gtaaggcctc ttcccaacat gtttggctga gcattgggtg 60
ggaagttcat accctttctg tgtggatttt attgaattcc aggagcaaca tatgaagttt 120
caggatttag ttgtaactat taatgtgaac ctggccctc aatcctgtat ggccggccact 180
gtttttgcaa aatcagcatg tgatatgttt gttttcaagc ttactcgatc actgcaaaga 240
tttctattta ttggaattag ggaacataca catgttttct ggctgaaaca cagcctcctc 300
aaatgatcat agcactgtct ctacaggctt ccatctgtat tatggttatg ttagtactac 360
caaaactacga ataaaacaga tgatctgctg gtgaaaaaca tggggccgct ctacaggatt 420
caagcttacg tacgtttgca tgca 444

<210> 9381

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-C9

<400> 9381

aggtaccgag ttaggaattc ccggctcgac tgatggatca taaaagcggg actgaacttg 60
tgctcactta tgaggataag gatggcgatt ggatgcttgt tgggtgatgtt ccatggcgaa 120
tgttcacaga cagctgtagg aggatgagga tcatgaaggg gtcagatgca gtgggcctcg 180
ctccgagggc ggccgagaag agcaagaacc agaaatggca aaaaggatga acccggtctg 240
tttctgtga ttcgcatcgt cgtacgaggg cgatggactt catgtgtgat gagaaagga 300
tttacttata tataagtacg tgtattctct ttattatttc cttgtatgtt ggctcggaac 360
aagcatgtta ggttgtgtaa gttgatgtgt gtgtgtatct actactactg cactatttta 420
ctttgattcg cgtgtgt 437

<210> 9382

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-D1

<400> 9382

gtccggaatt atcgggtcga cgaccactgg ccatctgata tacaagcttg gaggtattga 60
caagcgtgtg atcgagaggt ttgagaagga agccgctgag atgaacaaga ggtctttcaa 120
gtacgcctgg gtgcttgaca agctgaaggc cgagcgtgag aggggtatca ccattgatat 180
tgccctgtgg aagttcgaga ccaccaagta ctactgcacc gtcattgacg cccctgggtca 240
ccgtgacttc atcaagaaca tgattactgg tacctcccag gctgattgtg ctgtgctcat 300
cattgactct accactgggtg gttttgaggc tggatatctc aaggatggcc agaccctga 360
gcacgccctc cttgctttca ctcttgaggt gaagcagatg atctgctgct gcaacaagat 420
ggacgccacc actcccaagt actcaaa 447

<210> 9383

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-D10

<400> 9383

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tgaccatcct gggggtgctg atgtgctgct tgccgtgact ggtatggatg gcaccgagga 120
at ttgaagat gcgggccaca gcaaggatgc caaggagttg atgaaagatt acgtcattgg 180
ggagttggac ttggacgaaa cacctgacat gcctgagatg gaggttttca ggaaagagca 240
tgacaaggac ttcgccagca agctggcggc ttacgctgtg cagtactggg ccattccggt 300
aacagcagtt gggatatcag ccgtgcttgc tatattgtat gctcgaagga agtgatgatc 360
ggttatacgt tgattgaagg accatttttg ggtaaccaag acatttacag ctggttatgg 420
atggagagat tatgta 436

<210> 9384

<211> 410

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-D11

<400> 9384

aattcccggc tgcactacct gatcagctcc aagtgggtgc cttgcctcga gttcagcaag 60
gttgggttca tcttccgtga gcacaacgca tcccctgggt actacgatgg ccggtactgg 120
acaatgtgga agctgcctat gttcggatgc accgacgcca cgcaggtgat caacgaggtg 180
gacgaggtca agaaggagta ccctgacgcc tatgtccgca tcatcggatt cgacaacatg 240
cgtcaggtgc agtgcgtcag cttcatcgcc ttcaagccac cgggctgcga ggagtccggc 300
aaggcctaaa cagctcactc accacaggcc acatataaag tgccattgca gttttgtcaa 360
ctctgacatt gctttgggtt ttccttctcc atttatcttt cgtatttgtt 410

<210> 9385

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-D3

<400> 9385

gtccggagtt cacgggtcga caagctcatg gagaaagaga agaacgaggt cattgttgct 60
gacaactttt tcaactgggtc aaaagacaac ctgaagaagt ggatcggaca cccaagattt 120
gaactcatcc gtcacgatgt caccgaacca ctgctcgtgg aggttgacca aatctaccac 180
cttgcttgcc ctgcctcacc aatcttctac aagcacaacc ctgtcaagac catcaagacg 240
aatgtcattg gaaccttgaa catgcttgga cttgcaaaga gagttggagc tagaatattg 300
ttgacttcga cctctgaagt ttatggtgat ccccttgagc atcctcagac ggaggcgtac 360
tggggcaatg ttaacccaat tggagtcagg agctgctacg atgagggtaa gcgtgtagct 420
gagacactga tgttcgacta ccacaggcag ca 452

<210> 9386

<211> 404

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-D4

<400> 9386

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gtgccagatg aacttcaagc gtctttcgct gaccgacatc aagattgaca tcaagcgtat 120
ccctaagaag gcaactttga tcaaggccat ggaggaagca gatgtgaaaa ccaaatggga 180
gaacagctca tggggtaaga agcttgttgt ccagaagaga agagcatcgc tgaatgactt 240
tgacaggttc aaggatcatgt tggctaagat taagaggggt ggtgcatca ggcaagagct 300
tgccaagctc aagaaggagg ttgctgctta gattatctta gtggatggca tgttgagttt 360
tttgttccaa gttggatctg ctcatgttgc cagtgttctt aaag 404

<210> 9387

<211> 438

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-D9

<400> 9387

ggtaccagtc aggaattccc ggctcgacga agtgattgtg gctgacgaga agaattggga 60
taacatggtg atcgcgtgcg agtcgccggt gctggaggag ttctgggcgc cgtggtgctg 120
gccgtgccgg atgattgccc cggatgacga cgaactggca aaggactacg tggggaagat 180
caagtgtctg aaggatgaaca cggacgactg cccaaacatc gcatccacct acggcatccg 240
gagcatcccc accgtgctca tgttcaagga cggcgagaag aaggagagcg tcatcggcgc 300
cgtcccgaag acaaccctct gcaccataat cgacaagtac atcggcagct aattaatcat 360
tcttaattag cgattaatcg aggacgcaca cacctttact gttctgttcg cgagacagca 420
tatatgtatg tatatgat 438

<210> 9388

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-E10

<400> 9388

aggtaccagt cacgaattcc cggctcgaca ccttcacaag acaatccatc gactttttcg 60
gtgctctgcg tgctcgggtg tacgacgacg aggtgcgcaa gtgggtgacc tctaccggta 120
tcgagaacat tggcaagaag ctggtgaact cgcgggacgg accagtgacc tttgagcagc 180

caaagatgac agtggagaag ctgctagagt acgggcacat gctcgtccag gagcaggaca 240
atgtcaagcg tgtgcagctt gctgacacct acatgagcca ggcagctctg ggtgatgcta 300
accaggatgc gatgaagact ggtaccttct acgggtagaa cattctccat acacacccac 360
catctcttgc tgcataaggag gaggtaaagg ggcacagcaa ggtactttgc ctgtaccggc 420
aggatgcacc gaccagactg cg 442

<210> 9389
<211> 420
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-001-Q1-E1-E11
<400> 9389

aattcccggc tgcacgcgta cagcatcacc tggaatccta ggaaatctcc cggtagatat 60
gtttcagcac taagcttcac tgggttgcgac ttcgacatgt acgtgctaga gcatggcacg 120
aacaagacgg tgggtcagtg cactgctaca tgccctgtca aagatatcac ggatacggtg 180
gcttggcagt attgcaacgg tacaggatgt tgcttcacca acgtcgatgc cgagtttgct 240
acaggcatcg agataaagtt tgtccgccac aagattggac agctgaagtt ccaagcgaac 300
agcaaccgaa gctctatatg gcatacagtt gatgtaaccg ctgattccat tattatgtgg 360
ggatatcatcg ttaatgaaca tggccccttg caaaacagca cagattatgc atgtctcagc 420

<210> 9390
<211> 441
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-001-Q1-E1-E12
<400> 9390

aggtagctag tcaggaattc ccggctcgac ctagggggga catcatggac ggttctactt 60
gggaggaggg acgccaccac cgcaagtgcg tccttgcca acagtgcact ccccggtccc 120
aactccaacc ttaatgatct cctcgccgct ttctccaaga agggattaag cagcaccgac 180
atggttgctc tctcaggggg gcacaccatc ggccggggcg aatgccagaa ttaccgaaac 240
cggatctacg ccgacaccga catcgacggg accttcacgg cgtcgctgcg aggcgactgc 300

ccacaggggtg gtggcaacga cggcaacctc gcgcctctcg acgcgtcctc gcccgactac 360
 ttcgacaaca gctactttctc cggcctcctc agccatcggg ggctgctcca ctccgaccag 420
 gcgctgtacg acggcggtc c 441

<210> 9391
 <211> 482
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-001-Q1-E1-E2
 <400> 9391

gtccggattt agcgggtcga cgacctgac cgctccaaga gggtgccctg cctcgagttc 60
 agcaagggtg gcttcgtctt ccgtgagcac aacagctccc ccgggtacta cgacggtcga 120
 tactggacaa tgtggaagct gcctatgttc gggtgccaccg acgccacaca ggtgctcaac 180
 gaggtggagg aggtcaagaa ggagtacct gacgcctatg tccgcgtcat cggcttcgac 240
 aacctgcgcc aggtgcagtg cgtcagcttc atcgccttca ggccaccggg ttgcgaggag 300
 tccggcaagg cctaaactat gaggttgaaac aatggcctat ctcatatgaa gatcttttgt 360
 gaatttact tttgtccacg acctctgttt gcacgactct gctttccgac cggagcatac 420
 cttttgttct aaatgatttt gtgtatgtac gtaagaacct atgttttctca acatgcatac 480
 at 482

<210> 9392
 <211> 464
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-001-Q1-E1-E3
 <400> 9392

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 aatgttggcc atgcaaccca gcccatattt cgggtgcacc tttcaaccat tgtaaattg 120
 tgtatgtttt cctcgagcat acatcaatat atcattttga tctgacaaat gttatattcc 180
 tgttcacata attgtggaaa tccatccttt ggaaatcttg atgaattgtc gctgagttca 240
 tcagccacct cttgtcctc tccttgggtt aatgatgaac tcttgtaac agaaatcact 300

tcatagttca tttcccgaga atcttacagt gtcacccgt caaattgtgt cgcacctttt 360
 cttttcaagc atcctgagtc tgaggatatcc taacaccgat cagatctgaa tctcggtcag 420
 atatgatggt tggaacactt ttcaagagtc acaacattgg tctg 464

<210> 9393
 <211> 454
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-001-Q1-E1-E4
 <400> 9393

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 agcaagggttg ggttcattctt ccgtgagcac aacgcattccc ctgggtacta cgatggccgg 120
 tactggacaa tgtggaagct gcctatgttc gggcgcactg acgccacaca ggtgatcaac 180
 gaggtggaag aggtcaagaa ggagtaccct gacgcgtatg tccgcattcat cggattcgac 240
 aacatgcgtc aggtgcagtg cgtcaacttc atcgccttca agccaccggg ctgcgaggag 300
 tccggcaagg cctaaacagc tctctacca caggccacat ataaagtgcc attgcagttt 360
 tgtcaactct gacattgctt tgggttttcc ttctccattt atcgttctta tttgttctta 420
 aagatatgtg tatgtccatg ttcatgttcc aaca 454

<210> 9394
 <211> 467
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB29-001-Q1-E1-E5
 <400> 9394

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 gttcagcaag gttggcttcg tctttcgtga gcacaacagc tccccgggt actacgacgg 120
 ccgatactgg acaatgtgga agctgcctat gttcgggtgc accgacgcca cgcagggtgct 180
 caacgaggtg gaggaggtca agaaggagta ccctgacgcc tatgtccgcg tcatcggctt 240
 cgacaacctg cgccaggtgc agtgcgtcag cttcatcgca ttcaggccac cgggttgcca 300
 ggagtcctggc aaggcctaaa ctacgagttg aagcaatggc ctatgtatga ttgtcttttg 360

tgaacttcac tttgtccag gactctgctt tccgaccaga gcatatTTTT cgttcggat 420
gatctgtgtn tgtacgaaca taggttgtgg agcatgcata tggtaat 467

<210> 9395
<211> 441
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB29-001-Q1-E1-E6

<400> 9395

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ccttacgtaa agttgccaaa gtacgattaa cctctggatt tgaaatcact gcttatatac 120
ctggtattgg ccataattta caagaacatt ctgtagtact agtaacagga ggaaggggta 180
aggatttacc cgggtgtgata tatcgcatTA ttcgaggaac cctagatgct gtcgcagtaa 240
acaatcgta acaacggcgt tctactgcgt tgtagattct tatccaagac ttgtatcatt 300
tgatgatgcc atgtgaatcg ctagaaacat gtgaagtgtA tggctaacc aataacgaaa 360
gtttcgtaat gggactggag cangctacca tgagacacaa gatcctcttt ctaaagagat 420
tcgattcgga actcttatat g 441

<210> 9396
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-E9

<400> 9396

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ctgttattgt gagaattctt aattcaagag ttataggag ggacttatgt caccacaaac 120
agaaactaaa gcaggtgttg gatttaaagc tgggtgttaa gattataaat tgacttacta 180
caccacagag tatgaaacta aggatactga tatcttggca gcattccgag taagtctca 240
gcctgggggt cgcgccgaag aagcaggggc tgcagtagct gccgaatctt ctactggtac 300
atggacaact gtttgactg atggacttac cagtcttgat cgttacaaag gacgatgcta 360

tcacatcgag cctgttgctg gggaagacag ccaatggatc tgttatgtag cttatccatt 420
agacctatatt gaagagg 437

<210> 9397
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-F10

<400> 9397

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caagttagt acctccaacg gtatccagaa cattggcaag aagctgggta actccccga 120
cggacccctt acctttgggc aaccaaagat gacaattgag aagctgccag agtacaggca 180
catgcttggt caagaacacg gcaatgtcaa acccttttca accttctgac accctacatg 240
aaccaggcaa ctctgggtga tgccaaacag gatgcatga aaaacgggtc cttcaaggt 300
tagaacattc tccatacaca accaccatct cctgctgcat aagatgaggt aaaagggcac 360
aacaaggtag tttgcctgta ccggcaagat gcaacgacca aaatgccaag aaattctatc 420
caaacagcgg 430

<210> 9398
<211> 367
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-F2

<400> 9398

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cttcagggtgc caccactgca agggcaccct caagctcgca aattacaact cgttcgaagg 120
agtgtcttac tgcaggcctc actttgacca gctcttcaag aggaccggga gcctggacaa 180
gagcttcgaa ggcactccaa aggttggtcaa gccagaaagg aatgttgga atgagaatgc 240
tactaaagtc tccagcgcat ttgctggcac tagagagaaa tgttttggat gcagcatgac 300
agtctatcca attgagaggg ttactgtgaa taacactatg taccacagga gctgcttcaa 360
atgctgc 367

<210> 9399
 <211> 371
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-F4

<400> 9399

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ctgcgtgctc ggggtgtacga cgacgaggtg cgcaagtggg tgacctctac cggtatcgag 120
aacattggaa agaaccttgt gaactcgcgg gacggaccac tgacctttga gcagccaaag 180
atgacagtcg agaagcggct acagtacggg cacatgctcg tccagcagca ggacaatgtc 240
cagcgtgtgc agcctgctga cacctacatg agccaagcat ctctgggtga tgccaacat 300
gatgcgatga aacttggttc ctgctacggt tagaacattc tccatacaga cccagcatct 360
cgtgctgcat a 371
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<210> 9400
 <211> 421
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-F5

<400> 9400

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gagtacgatt aacctctgga ttgaaatca ctgcttatat acctggtatt ggccataatt 120
tacaagaaca ttctgtagta ttagtaagag gaggaagggt taaggattta cccggtgtga 180
gatatcgcat tattcgagga accctagatg ctgtcgcagt aaagaatcgt caacaagggc 240
gttctaaata tggggtcaaa aagccaaaaa aataagtgat tttagccctt ataaaaagaa 300
aacggattct tgaacctctt tcacgctcat gtcacgtcga ggtactgcag aaaaaagaac 360
tgcaaaatcc gatcaatttt ttcgtaatca attagttaac atggtggggt aacgtattat 420
g 421
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<210> 9401
 <211> 146
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-F7

<400> 9401

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cccgggtcga caatagcggg aaaatagttg ggatcaaagc caaagatgga attgtccttg   60
gtgtggacaa gctgataacc tcacagatga gacttgccgg gtccaaccgg agacttcatt  120
ccgtgcaccg gaactcgggt tgggtg                                     146
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<210> 9402

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-F9

<400> 9402

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agttcagcaa ggttgggttc atcttccgtg agcacaacgc atctcctggg tactacgatg  120
gccggtattg gacaatgtgg aagctgccta tgttcgggtg cactgacgcc acacaggtga  180
tcaacgaggt ggaggagggtc aagaaggagt accctgacgc gtatgtccgc atcatcggat  240
tcgacaacat gcgtcagggtg cagtgcgtca gcttcacgc cttcaagcca ccgggctgcg  300
atgagtccgg caaggcctaa acagctcact cacgacaggc catatataaa gtgccattgc  360
agttttgtca actctgacat tgctttgggt tttccttctc catttatctt tcttatttgt  420
tcctaagaat atgtgt                                     436
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<210> 9403

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-G11

<400> 9403

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gtgctctgcg tgctcgggtg tacgacgacg aggtgcgcaa gtgggtgacc tctaccggta  120
tcgagaacat tggcaagaag ctggtgaact cgcgggacgg accagtgacc tttgagcagc  180
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caaagatgac agtggagaag ctgctagagt acgggcacat gctcgtccag gagcatgaca 240
 atgtcaagcg tgtgcagctt gctgacacct acatgagcca ggcagctctg ggtgatgcta 300
 accaggatgc gatgaagact ggtaccttct acggttagaa cattctccat acacaccgc 360
 catctcttgc tgcataggac gaggtaaagg ggcacagcaa tgtactttgc ctgtaccggc 420
 aggatgcacc gaccaga 437

<210> 9404
 <211> 441
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-001-Q1-E1-G12
 <400> 9404

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 aaggtgaatt ggtccacaaa ttcagctttc taggctcatg gcaatgttga ttagtcacgt 120
 tccatgcgaa gatctatggc tgctgttaac gtgggaaact ttgatgctat tgaagttctt 180
 tcttttttgc ttgtagctta ccaagctggc cgcttggtgc tgttgaagcg ttaacgcccc 240
 ttgctaaagc tatatggctg tgctagtctg acagacaaca tggagctagc ttctgtcatg 300
 gggaaagtga aatgaaaaga agccaggtaa actacagtct ggagctcgct tctatcctgg 360
 ggaagatgac cagttggtga tacttatttt ggaacggagg gagtaatgta gcaactggac 420
 gatgtgccct ttattacata c 441

<210> 9405
 <211> 465
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-001-Q1-E1-G3
 <400> 9405

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 cgcaaggcaa aaaggtctat gcataggaaa aagagctctt tagaagtga gtttatacaa 180
 gtggttggtc aatttttggc gaaatacttt ggcgcaaaga caggagcttt tatcttccgc 240

ctatttgcca cacgtacaag cacactctta tcaaagtgtg ttggggccatc tgaacatata 300
acgctatgtg ggcacccaat ttccttcatg gcaatcaccg cctacgggca accacaggca 360
ctgatcatgc acttcctaaa ttacggtagc actatccggg taactctggc agttgatgac 420
gaacaattcc cagattgtca taagctttta gatgattttg ctgac 465

<210> 9406
<211> 441
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB29-001-Q1-E1-G4
<400> 9406

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ctccgtctgc gatcaccag caggagactc cagcttctcc ggctgctggc ccagaagatg 180
atctgcctct gctcctcac cctccactga cccagcatga ggaggatgga acgccagaag 240
atgatctgcc tetgctcct cctcttcac tgccccagca ggaggctgga gcgccagggt 300
cagcgccaga ggcaggatcc gtcgatgaca agtgggcagg acgtggcgat gacaagtggg 360
cgggacgcc ggatgacaag tgggtctagt ggttgcttan ggctggaac tgaactgaac 420
tgaactgggt gtacatagat g 441

<210> 9407
<211> 443
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-001-Q1-E1-G6
<400> 9407

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gtatcgagaa cattggcaag aagcttgtga actcgcggga cggaccagtg acctttgagc 180
agccaaagat gacagtgcag aagctgctag agtacgggca catgctcgtc caggagcagg 240
acaatgtcaa gcgtgtgcag cttgctgaca cctacatgag ccaggcagct ctgggtgatg 300

ctaaccagga tgcgatgaag actgggtcct tctacgggta gaacattctc catacacacc 360
 caccatctct tgctgcatac gaggaggtaa aggggcacag caaggtagtt tgcctgtgcc 420
 ggcaggatgc accgaccaga ctg 443

<210> 9408
 <211> 406
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-001-Q1-E1-H10
 <400> 9408

ggtaccagtc aggaattccc ggctcgacga ggccttcac gctaagtatg atgtcaagcc 60
 gaacaatgcc attctcgccg aggacaagca cttgcccattg tacgatgagt tgtccagcaa 120
 ggaaaatggt gaatacattg ctggaggagc caccgagaac tctatcaggg ttgcccaatg 180
 gatgcttcaa actcctgggtg caacaagtta catgggttgc attggaaagg acaagtatgg 240
 tgaggagatg aagagcgccg ctaaagctgc aggagttact gctcattact atgaggatga 300
 ggctgctcct acaggcacat gtgctgtatg tgttggttggg ggcgaaaggt cattgattgc 360
 aaacttatct gctgcgaact gctacaaatc tgagcatcta aagaag 406

<210> 9409
 <211> 439
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-001-Q1-E1-H12
 <400> 9409

taccagtcag gaattcccgg ctgcacgtac tccttactgg ctgggagatg gtcattgggga 60
 cgattgtatg gcgtccagat aggcctctccc acaaagagcc gcattgcctt gatgtagttg 120
 tcactatcca atgtaaagcg gtgatacatt cctgcaggca aaacaatcat gccacctttc 180
 ttaactgcta tacggatcca ctgttcgttt tgggtccctca catcaaagta tccactgccc 240
 tcgagacaat agcgtatctc ttcatcagta tgcaagtgc cttcaaagaa gttcttcagc 300
 ttggcccat agtttggtgaa cttctctgga catacgtcgc aaatgtccac ataagagtat 360
 cccctggcct caccgatttt cttgagattc tcgtctttct cccagtcac agcattcaag 420

gttcagctta caacaccca

439

<210> 9410
<211> 421
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB29-001-Q1-E1-H3

<400> 9410

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tactggacaa tgtggaagct gcctatgttc gggtgaccg acgccacgca ggtgctcaac 180
gacgtggagg aggtcaagaa ggagtaccct gacgcctatg tccgcgtcat cggcttcgac 240
aacctgcgcc aggtgcagtg cgtcggcttc atcgattca tgccaccggg ttgcgaggag 300
tctggcaatg cctaaactac gaggtaagc aatggcctat gtatgattgt cttttgtgaa 360
cttcactttt gtccaggact ctgctttccg accagagcat atttttcggt cggtatgata 420
t 421

<210> 9411
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-H4

<400> 9411

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tcagcaaggt tggcttcgtt ttccgtgagc acaacagctc ccccggttac tacgatggtc 120
gatactggac aatgtggaag ctgcctatgt tcgggtgcac cgacgctaca cagggtgctca 180
acgaggtgga ggaggtcaag aaggagtacc ctgacgccta tgtccgcgtc atcggcttcg 240
acaacctacg ccaggtgcag tgcgtcagct tcattgcctt caggccaccg gggtgcgagg 300
agtctggcaa ggcctaaact acgagttgaa acaatggcct atgtatgaag gtcttttgtg 360
aacttcactt ttgtccacga ctctgctgga cgaccagagc atatttttca ttctatatgg 420

tctgtgtatg tatgtacgaa catagattct cgagcatgca tatgtaaatt ct

472

<210> 9412

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-H8

<400> 9412

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agatccgagc cactgaagaa agatctggaa tggttcacgg aacaggggtca caccattcca 120
gaaccaactg ctgctggtac tgcatatgct tcctatctgg aagagttgtc tgagaaggat 180
ccccaagcat ttatctgcca cttctataat gtgtactttg ctcatactgc tggaggccga 240
atgattggca aaaaggttgc cgagaagatt ctggacaaga aagagctgga gttctacaag 300
tgggaaggta ccctgtccca gctgctgcag aatgtccgca tcacactaaa ccaagttgct 360
tctagctggt ctcggaaga gaaggaccac tgctt 395

<210> 9413

<211> 438

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-001-Q1-E1-H9

<400> 9413

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tcgagttcag caaggttggg ttcattctcc gtgagcacia cgtatctcct ggggtactacg 120
atggccggta ttggacaatg tggaagctgc ctatgttcgg gtgcactgac gccacacagg 180
tgatcaacga ggtggaggag gtcaagaagg agtaccctga cgcgtatgtc cgcattcatcg 240
gattcgacia catgcgtcag gtgcagtgcg tcagcttcat cgccttcaag ccaccgggct 300
gggaggagtc cggcaaggcc taaacagctc actcacgaca ggccatatat aaagtgccat 360
tgcagttttg tcaactctga cattgctttg ggttttcctt ctccatttat ctttcttatt 420
tgttcctaag aatatgtg 438

<210> 9414

<211> 454
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-002-Q1-E1-A10
 <400> 9414

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 caaggttggg ttcattcttc gtgagcacia cgcattctct gggtactacg atggccggta 120
 ttggacaatg tggaagctgc ctatgttcgg gtgcactgac gccacacagg tgatcaacga 180
 ggtggaggag gtcaagaagg agtaccctga cgcgtatgtc cgcattcatc gattcgacaa 240
 catgcgtcag gtacagtgcg tcagcttcat cgccttcaag ccaccgggct gcgaggagtc 300
 cggcaaggcc taaacagctc actcacgaca ggccatatat aaagtgccat tgcagttttg 360
 tcaactctga cattgctttg ggttttcctt ctccatttat ctttcttatt tgttcctaag 420
 aatatctgta tgtccatggt catgtaccaa catg 454

<210> 9415
 <211> 478
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-002-Q1-E1-A2
 <400> 9415

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 gcgtgctcgg gtgtacgacg acgaggtgcg caagtgggtg acctctaccg gtatcgagaa 120
 cattggcaag aggctggtga actcgcgga cggaccctg acctttgagc agccaaagat 180
 gacagtggag aagctgctag agtacgggca catgcttgct caggagcagg acaatgtcaa 240
 gcgtgtgcag cttgctgaca cctacatgag ccaggcagct ctgggtgatg ctaaccagga 300
 tgcgatgaag actggttcct tctacggtta gaacattctc catacacacc caccatctct 360
 tgctgcatag gaggaggtaa aagggcacag caaggtactt tgctgtacc ggcaggatgc 420
 accgaccaga ctgccaagaa cttcgaccca acggcgagga gtgacgacgg gagctgccc 478

<210> 9416
 <211> 418
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-A7

<400> 9416

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gggctggctc ttcttggcgc cgctgcctct tgcgcgaatc tcctcgccgt gcccattgccg 120
gtgcaggcag caatgctgga gcccgatgtc atcaggtaca gaaagctgga cagtggagta 180
aagcttgaag atgtagtcca tggcgaaggg ccggaggctc gggaaggcga tttagtgtcaa 240
ttcaactacg tgtgccgccg tgcaaattgg tatttctgtgc atagcacggt gaatcagttc 300
agcggcgaga gtaagccggt gacacttcca ctgcagctgc aagagatgat tcggggcctc 360
aaagacgtca tagtcggcat gaaagccgga ggcaagagga gggctctgat accccctg 418

<210> 9417

<211> 469

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-A8

<400> 9417

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tcaaggcttg tggagtcgat gagtttgtgg ctcagaagct cacaaaatgg aatgatgagc 120
tcatcatgca gttctactcc acaactcatt tctacctaga tggaaggatt gtctggatgt 180
ctgaaggtag gaggtaccag tccacggttg ctgaatgggc gaagttgatc aatgccccaa 240
aagagagtga agatgacttg gatgtctatg ccaaccggaa gaaggatcac aacacaatgg 300
cacacatgta caaggagatc ccacatgctg ctcttgagac acataagttt ggatctgtac 360
attaccttct gtcaggcttg ccaaccatca actggatcct caggcacact ctctttccca 420
agtcaggtag tcacaagatg atcagaggcc atgcaattaa cttgcttca 469

<210> 9418

<211> 460

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-A9

<400> 9418

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ttgtgagtg cctattgtca aagggtgtaaa attcgtgggg gatggatata ccaactgtga 120
agcttccggt gttggtagggt gtgagatcaa caatggagga tgctggaaag aaactaagaa 180
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tttcaagggc gatggtgtaa aaagctgtga agatattgat gaatgcaaag cgaaatctgc 300
ctgtcagtg aatggctgca gttgcgagaa tacatgggga agctatgaat gcagctgtgg 360
tggtacaac atgttatata tgagagagca agacacgtgc atcagcaaag aagctgcctc 420
ctcagtcggc tggagcttca tgtgggttat tttcttcgga 460

<210> 9419

<211> 342

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB29-002-Q1-E1-B11

<400> 9419

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agccgcacac cccctctttt acaccaaagc tgggaaact ctcccaaaaa ggggtgcgtt 180
cgtcacaggt acctccaaac attacagaat tattacaagt gggatttgga gttgctgttg 240
ttgttgtaat cctcaacctg ttgtgtgttg taattggtgt aatccacacc aagttttgcc 300
tccaacaaac aaataaatca ctgaagggtt ctccttcct tg 342

<210> 9420

<211> 459

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB29-002-Q1-E1-B12

<400> 9420

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agtctcatct atccatttca tattgccttg cacaatgatc cccttgagta tgttcgcaag 120

gcaaaaaggt ctatgcatag gaaaaagagc tctttagaag tgaagtttat acaagtgggt 180
gttcaatttt tgggtgaaata ctttggcgca aagacaggag cttttatctt ccgcctatct 240
gccacacgta caagcacact cttatcaaat gttgttgggc catctgaaca tataacgcta 300
tgtgggcacc caatttcctt catggcaatc accgcctacg ggcaaccaca ggcaactgatc 360
atgcacttcc tagattacgg tagcactatc cgggtaactc tggcagttga tgacaaacag 420
ttcccagatt gtcataagct tttagatgat tttgctgac 459

<210> 9421
<211> 439
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB29-002-Q1-E1-B2
<400> 9421

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ttgacaggat caaggagcgc gttgaggaga aagaaggcat tcctcctgtg cagcaaaggc 180
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gtggctcggc cctocatctt gtccttgctc tganggggtg ttactagtta agctgtaatg 300
ggaacacttg cctcctgaga gaagtgacca ttggtggcat ggaacctgtg ttggtgttgc 360
aaagagataa taacaaacta gctttgctta gtgggagggg ctgtcttcca tgttatctgc 420
ctatatgatt tgacaaaac 439

<210> 9422
<211> 481
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-B8
<400> 9422

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atctggccgg tcggctggat ttaagcctcc tcttgcttca tctagcatgt attggatctc 180

gggccacttt gcattgcatg tgaatgttat aaacaggtct ggatatccag cccaacggca 240
tattgcaaaa gcgtcttgca agttctgtgc cttgtatctt ctgcctcctg taaaagatga 300
aggtacaatt atcctctttc caacctgctc tgttctgggtg tcacctcgct caatcgctc 360
ttgcagtcca ctataaagtt cagttcgtaa cttcccttga ttattcctga tctagtttag 420
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c 481

<210> 9423
<211> 423
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-B9
<400> 9423

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agaaggggtt tcattgggtg aagatctata caaacggaga cagccgttgc cttcactgga 180
tgctatatat ttcaccaac caactaaaga aaacggtgtt atgttctctc ctgacatgtc 240
aggaagaagc ccgttataca agaaggcgta tgtgtttttc agttctccca tacagaaaga 300
cttagttgct caaataaaaa gggattcaag tatattacct cgtattgggtg cacttagtga 360
gatgaatttg gagtacttcc ctattgattc ccagggtttc ataactgacc catgaaaggg 420
caa 423

<210> 9424
<211> 437
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB29-002-Q1-E1-C11
<400> 9424

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agcggctgat gccaggagtg gctcctacgg caatgccacc atctctcatg gatcgtagac 180
cgaggagggt catctgtagt tctattaggc gacttggcctt aagggttgggt atgaactatg 240
atcggcgaat tttgtcagat tggctggagt tttgcaccct tgtggggtag tgttaggatac 300
gaccggtgaa tttggtctgt tcttcagacc gacccttgcg cggcagcttt gaattgctga 360
ggccagtttg aattatgcta aaccttcacg gatgatgtta tgggcgttca ggcttacttt 420
canggttggtt ttctgat 437

<210> 9425
<211> 445
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-C12

<400> 9425
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caattaccat tttaacagac caagcgaggg cgatggaagt cgctattgag gacgtatatac 120
cggatgcaac acagagatgg tgcaagtggc acatcctgaa gaaggccaaa gagagcctgg 180
ggtctaatta caccaagaaa tctgatttca gggcagaatt ccacaaattg gttcacgaaa 240
tgctgactat agaggagttt gaggacaggt gggcagcgtt gcttgagaag tattcactga 300
ctaagaacac gcacctgacg caaatttacg agacaaggca gaaatgggcc aagccatact 360
ttgcaggaaa attctgcgca aggcaaaaca gactgggag gagtgagagc gccaatcaca 420
tgttgagaca gtatgtgcca acttc 445

<210> 9426
<211> 362
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-C3

<400> 9426
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ttcaggtgcc accactgcaa gggcaccctc aagctcgcaa attacaactc gttcgaagga 120
gtgctctact gcaggcctca ctttgaccag ctcttcaaga ggaccgggag cctggacaag 180

agcttcgaag gcactccaaa ggttgtcaag ccagaaagga atgttgggaa tgagaatgct 240
 actaaagtct ccagcgcatt tgctggcact agagagaaat gttttggatg cagcaagaca 300
 gtctatccaa ttgagaaggt tactgtgaat aacactatgt accacaagag ctgcttcaaa 360
 tg 362

<210> 9427
 <211> 436
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB29-002-Q1-E1-C7
 <400> 9427

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 acacaatcga cagaatcaag gaacgtgttg aggagaaaga gggattcca cctgttcaac 180
 agaggctcat ctatgctggg aagcaactcg ctgatgacaa aactgctaag gactacaaca 240
 tcgaagggtg ttcagtgtc catcttgtgc ttgctctgaa gggcggtcag tagatgcaac 300
 ctcgacgtgg accgtaaagg ccatttctac cagaacttgt ttgcagacct agatctgtga 360
 attttgcggt tgattgaagt gccatgtaat tgacgcattt gtgaagtcag ctgtcacctg 420
 tacttggatg gaattg 436

<210> 9428
 <211> 419
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-002-Q1-E1-D1
 <400> 9428

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 cttggaggta ttgacaagcg tgtgatcgag aggtttgaga aggaagccgc tgagatgaac 120
 aagaggtctt tcaagtacgc ctgggtgctt gacaagctga aggccgagcg tgagaggggt 180
 atcaccattg atattgcct gtggaagttc gagaccacca agtactactg caccgtcatt 240
 gacgcccctg gtcaccgtga cttcatcaag aacatgatta ctggtacctc ccaggctgat 300

tgtgctgtgc tcatcattga ctctaccact ggtggttttg agactggtat ctccaaggat 360
ggccagacgc gtgagcacgc cctccttgct ttcactcttg gagtgaagca gatgatcta 419

<210> 9429
<211> 354
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-D10

<400> 9429

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acgacgacga ggtgcgcaag tgggtgacct ctaccggtat cgagaacatt ggcaagaagc 120
ttgtgaactc gcgggacgga ccagtgacct ttgagcagcc aaagatgaca gtcgagaagc 180
tgctagagta cgggcacatg ctctccagg agcaggacaa tgtcaagcgt gtgcagcttg 240
ctgacaccta catgagccag gcagctctgg gtgatgctaa ccaggatgcg atgaagactg 300
gttccttcta cggttagaac attctccata cacacgcagc atctcttgct gcat 354

<210> 9430
<211> 474
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-D11

<400> 9430

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ttgggaagtt tgacagtgtg cttgagccag gatgccactg cctgccttgg atctttggga 120
aacgtgtagt tggccatctc aactcaggt tgcagcagct ggatgtgcgc tgtgaaacta 180
agacaaagga caatgtgttc gtcactgttg ttgcatcgat tcagtaccga cctctggctg 240
gcaaagaaag tgacgcatac taaaaactga ccaacacaag atcccagatt caagcctatg 300
tctttgatgt gatcagggca agtgttccaa agctcaacct ggatgatgct ttcgtgcaga 360
agaacgatat agcaaaggct gtggaggatg aacttgaaaa agctatgtcg gcatatggct 420
ttgagatcgt gcagaccctc attgtcgaca tcgaaccaga tgcgcatgtc aagc 474

<210> 9431
 <211> 342
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-D12

<400> 9431

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 ttcacggtga gattcgagac cgggagctcc aatttgtagg ttcccactgc gaaatgctat 120
 ttcactaggg catggtagtt ccatgccaaa tagaaatcga gcacgtcagg catgtaatag 180
 catatggtga gatttgcgat acatatgggg atctagaact tacactggac ttttcagcat 240
 tgagaaagta ttggttggag acacagatgt cgtaaacatt gggacattga tcacaacagt 300
 gaatatatgt ccatttgcac tctcgtgagt atgatgacac ca 342

<210> 9432
 <211> 391
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-D3

<400> 9432

ggtccggaat accgggtcga cttttccact atcaacccca aaaaacccaa ctctgcctta 60
 cgtaaagttg ccagagtacg attaacctct ggatttgaaa tcaactgctta tatacctggt 120
 attggccata atttacaaga acattctgta gtattagtaa gaggaggaag ggttaaggat 180
 ttaccggtg tgagatatcg cattattcga ggaaccctag atgctgtcgc agtaaagaat 240
 cgtcaacaag ggcgttctag tgcgtttag attcttatcc aagacttgta tcatttgatg 300
 atgccatgtg aatcgctaga aacatgtgaa gtgtatggct aaccaataa cgaaagtttc 360
 gtaaggggac tggagcaggc taccatgaga c 391

<210> 9433
 <211> 316
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-D4

<400> 9433

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 tgttgcatat aagaatgtga ttggagcccg cctgcctca tggcgcatca tctctccat 120
 tgagcagaag gaggagagcc gtggcaacga ggaccgggtc acgctcatca aggagtaccg 180
 tggcaagatc gagactgagc ttagcaagat ctgtgatggc atcctcaagc tgctcgaaac 240
 ccaccttgct cctgtctcca ctgcccctga gtccaaagtc ttctatctta agatgaatgg 300
 tgactactac agatat 316

<210> 9434
 <211> 234
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-002-Q1-E1-D5
 <400> 9434

accggtcagg acttcgcggg tggacggggt cgcaggctag gttaaggaag gagatcaacg 60
 aactcgcgct taaaagatat cttcatcttc cagcgcgctt tggattcctg gagcgttgca 120
 agatcacgct caagtccgtg gagaggaaca ggtcgtggga ggtggaagggt gggatagggg 180
 atccaccggt gagcaagccc tgtgagtgcc atacaccagg gaggagggcg gact 234

<210> 9435
 <211> 480
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-002-Q1-E1-D6
 <400> 9435

taccggtcag gaattcccgg gtcgcctact tgatccgctc caagtgggtg cctgcctcg 60
 agttcagcaa ggttggtctc gttttccgtg agcacaacag ctccccggg tactacgatg 120
 gtcgatactg gacaatgtgg aagctgccta tgttcgggtg caccgacgcc acacaggtgc 180
 tcaacgaggt ggaggaggtc aagaaggagt accctgacgc ctatgtccgc gtcacgggtc 240
 tcgacaacct gcgccagggt cagtgcgtca gttcatcgc cttcaggcca ccgggttgcg 300
 aggagtctgg caaggcctaa actacgagtt gaaacattgg cctatgtatg aaggctcttt 360
 gtgaacttaa cttttgtcca ccactctgct ggacgaccag agcatatctt tcattctata 420

tggtctgtgt gtgtatgtac gaacataggt tctcgagcat gcatatgtaa attctagaac 480

<210> 9436

<211> 353

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-D7

<400> 9436

gggtcgacga cagcaacgtc ttcgagtggc aggtcaccat catcggcccg cccgagaccc 60

tatatgatgg aggctatttc aatgcaataa tgagcttccc acaaaattat ccgaacagcc 120

ctccaacagt cagattcact tctgaaatgt ggcacctaata tgtttatccg gatgggcggg 180

tatgcatttc tattcgatcat ccacctgggtg atgatcccaa cggatacgag ctgcgcgagt 240

agcgttggac accagtccat acggttgaga gtatagtatt aagcatcatt tcgatgcttt 300

ctagtccaaa tgatgaatca ccggcaaata ttgaagcagc taacgactgg aga 353

<210> 9437

<211> 359

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-E1

<400> 9437

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gcgtgctcgg gtgtacgacg acgaggtgcg caagtgggtg acctctaccg gtatcgagaa 120

cattggcaag aagcttgtga actcgcgga cggaccactg acctttgggc aaccaagat 180

gacagtcgag aagctgctag agtacgggca catgctcgtc caggagcagg acaatgtcaa 240

gcgtgtgcag cttgctgaca cctacatgag ccaggcagct ctgggtgatg ctaaccagga 300

tgcgatgaag actggttccg tctaggggta gaacattctc catacacacc caacatctc 359

<210> 9438

<211> 481

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB29-002-Q1-E1-E11

<400> 9438

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tttcgggtgct ctgcgtgctc ggggtgtacga cgacgagggtg cgcaagtggg tgacctctac 120
cggtatcgag aacattggca agaagctgggt gaactcgagg gacggaccag tgacctttga 180
gcagccaaag atgacagtgg agaagctgct agagtacggg cacatgctcg tccaggagca 240
ggacaatgtc aagcgtgtgc agcttgetga cacctacatg agccaggcag ctctgggtga 300
tgctaaccag gatgcgatga agactgggtac tttctacggg tagaacattc tccatacaca 360
cccaccatct cttgctgcat aggaggaggt aaaggggcac agcaaggtag tttgcctgta 420
ccggcaggat gcaccgacca gactgccaag aacttcgnac caacggcgaa gagtgcgcac 480
g 481

<210> 9439

<211> 471

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-E12

<400> 9439

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tgctgacgtg tccaaatatt tgtatgcagg ccttgatata tcttgcgcag gacagactgc 120
tcactgttcg tgaaagtgtc cgattgcaag gttttcctga tagctacagg tttcgtggaa 180
cagtcaaaga caggatatgc cagattggaa atgctgtggc cgtaccggtt ggccgtgcac 240
ttgggtatgc cttggccatg gccaacctga acaagactgg aaatgatccc ctcatggagc 300
taccacccaa gtttgcattc tctcatatag aaggcactcc ttagtcagac tggcaaaacc 360
taacggttga cttttccacc tgggtttaag tctcgtcatc tccgttcatt ctccgctaga 420
aaagctgggt acctcatggt cgtgaatatc attaagactc gtgaatatcg t 471

<210> 9440

<211> 465

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-E2

<400> 9440

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tagttcagca aggttgggtt tatcttccgt gagcacaacg catcccctgg gtactacgat 120
ggccggtgct ggacaatgtg gaagctgcct atgttcgggt gcaccgacgc cagcgagggtg 180
atcaacgagg tggaggaggt caagaaggag taccctgacg cgtatgtccg catcatcgga 240
ttcgacaaca tgcgccaggt gcagtgcgtc agcttcatcg ctttcaagcc accgggctgc 300
gaggagtccg gcaaggccta aacagctcac tcaccacggg ccacatataa agtgccattg 360
cggttttgtc aactctgaca ttgctttggg ttttccattt ccatttatct ttcttggtg 420
gtcccaagat aagaataatt gtaggtccat gttcccgaca tgact 465

<210> 9441

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-E3

<400> 9441

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ttttgtgtgc gtctcgattg gctcaccat tgggaagatt cccaccgttg gagttgtgta 120
caaccccatc atgaatgagc ttttcacagc tgttcgtgga aaagggtgctt ttctcaatgg 180
ttctccaatt aaaacatcgc ctcaaaatga gttggtgaag gctcttatgg tgacagaggt 240
atggaccaa agagacaagt ccactttgga tgatacaacc aacagaatta ataagttact 300
attcaagatt agatctatac gtatgtgtgg ctctttggct ctaaacaatgt gtggagttgc 360
ctgtggtatg ctagatttgt gttatgagat cggttttggt ggcccctggg atgtggctgc 420
tgg 423

<210> 9442

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-E4

<400> 9442

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cagcaagggtt ggggtcatct tccgtgagca caacgcatct cctgggtact acgatggccg 120
gtattggaca atgtggaagc tgcctatgtt cgggtgcact gacgccacac aggtgatcaa 180
cgaggtggag gaggtcaaga aggagtaccc tgacgcgtat gtccgcatca tcggattcga 240
caacatgcgt caggtgcagt gcgtcaactt catcgecttc aagccaccgg gctgcgagga 300
gtccggcaag gcctaaacag ctactcacg acaggccata tataaagtgc cattgcagtt 360
ttgtcaactc tgacattgct ttgggggttt ccttctccat ttatctttca tagttgttcc 420
taag 424

<210> 9443

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-E6

<400> 9443

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gcgccccgtg cccgtctctc caccatcgtc gccagcctcg gcacccccgc gccctccaac 120
tcctctctct tccgccccaa gtcctatcagg aacaccccag tccaggccgc gcccgtcgca 180
cccgattga tggacgccgc cgtggagcgc ctcaagaccg gggtcgagaa gttcaagacc 240
gaggtctacg acaagaagcc cgatttcttc gagccctca aggccggcca ggcgcccaag 300
tacatgggtg tcgctgccc gcactcccg gtgtgcccct cggtcaccct gggcctgtag 360
cccggcgagg ccttcaccat ccgcaacatc gccaacatgg tcacgtccta ctgcaagaac 420
aagtacgc 428

<210> 9444

<211> 472

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-F11

<400> 9444

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 cttcttcttt ggcggtctgc accttccgtg cgggctgtgg aggacggatg acgcggtgct 120
 gttagggcgc tgacaggcag cggttctacg tccccctctcc gagcagctct ttcattgggac 180
 aggcaattga aggtatggac tacaacagta cagactgtta tatactctgga aggcgaaatt 240
 ttggggcggt acctgggttat tgaatgacag acagttatat aagagagaag attcctaggt 300
 ttgccatgac agacaagatg gtggcaaggc cttgctcgtt ttagaggaca tgggatacat 360
 acaggaagca gctgaaattg atgttggcaa gtctgggtatt tagaagaaat ctcatgaagt 420
 cattcaacaa acgtttgcga acaagcaatt tgtcttctg gacatggctt ca 472

<210> 9445
 <211> 427
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-002-Q1-E1-F12
 <400> 9445

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 ccacatcgct caatacaaag aggcttgatg atgatacaga gaatcttgct catgagcgtg 120
 tgccgtcaga cctgaagaag agcattatgc aggctagaac ggacaagaag ctcacacagg 180
 cacagcttgc acagctgatc aatgagaagc cacaagtcac ccaggagtac gagtcaggca 240
 aggctatccc aaaccaacgg atcatcgga agctggaaag ggctcttggc acaaagctgc 300
 gaggcattgaa gtgaagctgc gtgcatctga caggagtcca gtctttcaag agaggagctt 360
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 cctggag 427

<210> 9446
 <211> 411
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB29-002-Q1-E1-F2
 <400> 9446

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tctagaaaat gccgagacta gcttgcaact aggctcgatg cttatgaaag ggctgggtgt 180
catgtctgat gatgtatctt tcttgagtaa gcttgtgagg gactcgatgg agttacaagc 240
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tagagtatcg gacttggttg agtccaatgg gaacgggtcc ggaatgattc cccgggagca 360
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<210> 9447
<211> 425
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB29-002-Q1-E1-F3
<400> 9447

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gtggaagggtg gctgggcctc ccccaaaaga aaatgtgggtc cgtggagggc ccgtggaccc 180
ctccaagctc gtcgtcgagc tggcacccat ggagatccgc acattcgtca tcaacttcga 240
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accagaatgt tgtattgttg aagctgaact cgaatgagtt gtgaatagca ataagaaata 360
atgtggccaa cggagggtcg agcgtcatca acttcttaaa taagcttccg ctagtgagat 420
caana 425

<210> 9448
<211> 459
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB29-002-Q1-E1-F4
<400> 9448

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aaagcagagg cgccgtacat accgtgctca cggacgcac cgccttaca tgtccaaccc 120

ctgccacatt gagctgatct tgtcagagaa ggaagagcct gtgaagaagg aggctgataa 180
 cgtcgtcgca ccaaggaaag ctatctaagc taccggaatg gatgcattcg cccaacagtc 240
 ttagttgtag ttcttctcaa gtacctttgt tggcagtgtt tgttgccctcc ttgatgtttt 300
 tgttaccaac attgagtaag gatttgtaa gggtgatgtt atccttgtga ttgcgagtgg 360
 tctttatatg ctaaaacagt ttcagatatt tgagcattag cacaccagaa cttatttctc 420
 agagatgctg gtcctttcgg gctcttcact ttgaggat 459

<210> 9449
 <211> 401
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-002-Q1-E1-F5
 <400> 9449

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 tccgagccga gctacgtacc taacgtactg gtagtagtac atgtgcgatt tatatatgag 180
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 ccctagaggc ctagaacaga gtagaactgc agaaagaata gccagcccgt cctgccgttc 300
 gggttcagctc tccagcggca cgacgggtgg gtgggtgtgtg ttgcatgtat gtatgtatct 360
 gatgtgatcc cctaaaaaag agtatctgat gtgagtctac g 401

<210> 9450
 <211> 464
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB29-002-Q1-E1-F8
 <400> 9450

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 tgctcgacgc aattccgctg cagaatcttc tctgccattt gggggagcgc atgcgggtgac 120
 ggtgtttcct atggcgtgtg ctccaaatta tattgccatt ggcttttcca actatggttt 180
 agatacgggg acaagggtac tctcgccgag ctacaagaac ttcccacgga aatcctccta 240

caagttttctc aagggtccgtg ctctgcatgg aaatgatggc cgtagaacgc tgattgacat 300
aatctggatc atgccggagc tgtcaatgaa ctatttcata aacgggtcca tgagagctct 360
tttcggcggc atcgcaactgc tgggtggctt ttatgttgcg cagacattat ccctgtcatt 420
cgggtgctttg ggcgttaacg atgttatcgc atgagttgtg tgtg 464

<210> 9451
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-F9

<400> 9451

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gatgatgtgt ttgctttcga cggccgtttc ctttgcctggg tggactactt ctgcggcgtc 180
gtgctatgcg acttctccaa aaatgtggac tcccagggtc tccacttcgt gccttttctt 240
ggaggaatca aatacccttt tgacgcacgg ttcccgaggt acttcccagg gaggttccga 300
agtgcgtcca tcagccaagg catgatccgc tatatccaca ttgacaatga ctttcatgag 360
actaccact ccgactggca agtcatgatt cctcctaaga gaagccaacg gcggcagcag 420
cagcttcccc acaaaatcac catttggacg ttgaactcca agtt 464

<210> 9452
<211> 472
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB29-002-Q1-E1-G10

<400> 9452

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cgtcctctct ctccccctcc ccctccccct acatattccg tggtggcgca ggacatgtga 120
taaagggacc tgatgaaggg atcttgctga tgaaagttgg aggattacgt cggttgtaca 180
taccgggtca attagcattc cctaaggggc ttacatcagc tcccgggagg ccaagagtgg 240

ctccgagcag ccccgctcgta tttagcgtca acctattggt cgtacctggt cttgacgatg 300
atgggtgaaa gcatcatctt gcatctttac aggacgcaac tgaagagagt gattttcctt 360
ttgtgaatta ccatgtgagt agagtgacaa ttgttttctg cagcataata tacaaaacta 420
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<210> 9453
<211> 455
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-G2
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gggtgtgccg gtggttcaca cagttgctct tggcccttga ctacctgcac tgcaaccgcg 180
tgctccaccg tgacctcaag tgttccaata tcttgtaac caaggataac aacatacgac 240
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ccccaaacta catgtgcccc gaaatactcg cggacatacc ttatgggttac aaatctgata 360
tatggtcgct tggttgctgt atgttcgaga ttttagcaca gcgctctgca ttcaaagcta 420
cagacatggc aacattagtc aacaaaataa acaga 455

<210> 9454
<211> 394
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-G3
<400> 9454

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gggtattggcc ataatttaca ataacattct gtagtattag taagaggagg aaggggtaag 180
gatttaccgc gtgtgagata tcgcattatt cgaggaaccc tagatgctgt cgcagtaaag 240
aatcgtcaac aagggcggtc tagtgcgttg tagattctta tccaagactt gtatcatttg 300

atgatgccat gtgaatcgct agaaacatgt gaagtgtatg gctaaccctaa taacgaaagt 360
ttcgtaaggg gactggagca agctaccatg agac 394

<210> 9455
<211> 289
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-G5

<400> 9455

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ctatcaagtg ggatcagatt tccaggttgc tcggtgagat ttacagttt ttcatagttt 120
agatcgagtc tgttcttcat acctacagtc gacaaagaag ccacaatcta cattaagggt 180
agttcatcat atccgaacca atcagagcct ttgcataatc gttttagggt ttgactttgc 240
tgaatttgcc ggtgcacact cgggtatactt gctgggtctta acgtccagt 289

<210> 9456
<211> 485
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB29-002-Q1-E1-G6

<400> 9456

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gatggccggg actggacaat gtggaagctg cctatgttcg ggtgcaccga cgccacacag 180
gtgatcaacg aggtggaaga ggtcaagaag gaggaccctg acgcgtacgt ccgcatcatc 240
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ttgcggtttt gtcaactctg acattgcttt gggttttctt tctccattta tctttcttgc 420
ttgtccctaa gaatatgtgt atgtccatgt tcatgtacca acatgtctcg agaaaacatg 480
ctcgt 485

<210> 9457

<211> 290
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB29-002-Q1-E1-G8

 <400> 9457

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 cgaagattat gccaggacac agcaagtaat ccgccccaaa aaactaaatg ggttacaaaa 180
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<210> 9458
 <211> 474
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB29-002-Q1-E1-H10

 <400> 9458

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 ctacgacggc cgatactgga caatgtggaa gctgcctatg ttcgggtgca ctgacgccac 180
 acaggtgctg aacgaggtgg aggaggtcaa gaaggagtac cctgacgcct atgtccgtgt 240
 catcggtctc gacaacctgc gccaggtgca gtgcgtcagc ttcacgcct ttaggccacc 300
 ggggttgcgag gagtccggca aggccctaac tacgagttga aacaatggcc tatctcgtat 360
 gaaggtcttt tgtgaacttc acttttgtcc aaaactctgc tgtacgactc tgctttctga 420
 ccggagcata ctttttgttc tatatgattt tgtgtatgta tgtacgaaca tagg 474

<210> 9459
 <211> 476
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB29-002-Q1-E1-H12

 <400> 9459

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cggagctcca accaaggaat aatagttcaa acagcaacgt gacatcagca ggttcctcca 180
gcttaacctc ttcagagaat ggacctgaat attcaagccc ggtagcacia tgatgagtgg 240
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gaaacattgt agaacaactt ccgtttcact tttatttttg taatatctta tatgat 476

<210> 9460
<211> 477
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-H5
<400> 9460

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ctgggtattgg ccataattta caagaacatt ctgtagtatt agtaagagga ggaaggggta 180
aggatttacc cgggtgtgaga tatcgcatia ttcgaggaa cctagatgct gtcgcagtaa 240
agaatcgtca acaagggcgt tctaaatatg ggggtcaaaaa gccaaaaaaa taagtgattt 300
tagcccttat aaaaagaaaa cggattcttg aacctctttc acgctcatgt cagctcgagg 360
tactgcagaa aaaagaactg caaaatccga tccaattttt cgtaatcgat tagttaacat 420
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<210> 9461
<211> 448
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB29-002-Q1-E1-H7
<400> 9461

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 acaagaacat tctgtagtat tagtaagagg aggaagggtt aaggatttac ccggtgtgag 180
 atatcgcat attcgacgaa ccttagatgc tgcgcagta aagaatcgtc aacaagggcg 240
 ttctaaatat ggggtcaaaa agccaaatga ataagtatt ttagccctta taaaaagaaa 300
 acggattctt gaacctcttt cacactcatg tcacgtctag gtactgcaga aaaaagaact 360
 gcaaaatccg atccaatttt tcgtaatcga ttagttaaca tgggtggttaa ccgtattatg 420
 aaagacggaa aataatcatt ggcttattc 448

<210> 9462
 <211> 442
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB29-002-Q1-E1-H9
 <400> 9462

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 ctattgtggc acatcttact aagttgaata acatagccac cctttttact catgatgaga 120
 agacttgcta ttactacatt ctcaaattat ttctgttctc attaaagggt gatgctaaag 180
 cttggtacaa tactcttgct actgggtgtg tgcgtagtcc ccaggatatg atttattact 240
 tctctgaaaa atatttccct gtcataaga aacaagctgc cttacatgaa atatttaagt 300
 ttgtgcaa ataaagaagag agtctccac aagcttggcg gaggctttgc caattactta 360
 atgctttgcc tgattatcct cttaagaaaa atgaaatgct tgatatcttc tataatggag 420
 taaccgatgc ttctaggat tt 442

<210> 9463
 <211> 321
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB30-001-Q1-E1-A1
 <400> 9463

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attcatgag gctggcctct acgacggatg gctcccgcac ctgtttgttg ggaacttgct 180
caaggggcag actgttggag tgatcggagc tggccgcac ggctcagctt atgcaaggat 240
gatgattgag gggttcaaga tgaacttgat ctacttcgac ctgtaccagt ccacacggct 300
cgagaaattc gtcaccgcgt a 321

<210> 9464
<211> 460
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB30-001-Q1-E1-A10
<400> 9464

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tggaattgtc cttggtgtgg agaagctgat aacctcaaag atgatacttg ccgggtcgaa 120
ccggagactt cattctgtgc accggaactc tggcttggct gtggctggat tagcagcaga 180
cggtaggcag atagtctcaa gagcaaagtc agaagcagcc aattatgaaa aggtatacgg 240
agaacccatg cctgtaaaagg aattagctga tcgcgttgct agctatgttc atctgtgtac 300
actctactgg tggctcaggc cttttggctg tggagttatt cttggaggct atgataggga 360
tgggccacag ctctacatga tcgaaccttc aggcctctcc tagaaatatt ttggtgctgc 420
tctgggtaaa ggatgacgag ctgcaaagac ggagattgag 460

<210> 9465
<211> 417
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB30-001-Q1-E1-A11
<400> 9465

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gtacatcgcc ctctctgtct gctttctggg gtccttcact tgcttcatcc actccgcgaa 180
gtactatgtc caaaccagct tcctggtgac cacgctggac tctgacgtct cggcgagcta 240
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cttctcaacg acgctgctga tgtggatatt cgggcccata ccgatgtctg tctgctcagt 360
gttcatggtg ttcattctac acatgctgga cagcaactcc ctgcccctgc accagta 417

<210> 9466
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-A2

<400> 9466

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ttccctgatt cagtgccttg agcttgctcg tctcaccta cagccagccc cgcagcttga 180
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atgtccgtgc aggtgatgtt ggcgtggatt tcgtctccca caactgcttt gatccatctt 420
tagtatcagg atggtggaga tgttttc 447

<210> 9467
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-A3

<400> 9467

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atcaccggtt tggtatctga atcccaggtt tctccttctg atcggcgagt tggggcttgc 180
ggcgatcttg gagaaaagac gggaggcaag ctgcatctgc gcacggaagc ttccgatctg 240
cccggctggc gtctcagatc tggtgctgat ctgatgcttc acggcggatc tggttgttcc 300
cggcggtctc aagtcggcgc agcggctggc ggcgagtttt ccggcaagca cgtgggatcc 360
cgtctgctcc tctacctcgt gcgacgacgg ccaacggctc tttgtgttga taataattat 420

<210> 9468
 <211> 443
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB30-001-Q1-E1-A4

 <400> 9468

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ctcaaccagc cgagcactcc tcctcctcgc cgtcgtcgtc tccgatccac taccgcttcc  120
gcagccatgg tgaacgttcc gaagacgggg aatacctact gcacgaacaa cgactgcagg  180
aaacacaccc tccacaaggt taccagtagc aacaaaggca aggacatgcc tttctgctca  240
cgggaagcgt cgttacgacc gcaagcagtc tgcataatgt ggccacacaa accctgtttt  300
caacaagaag gccaaaggcaa caaagaacat tgtgtggaag ctgcactgcc agacctgcaa  360
gcattttctca cagcgtgcc aacccaagtg caagcacttt taaatccgtg gccacaagaa  420
cggccgtgga acatccctct tca                                           443
  
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<210> 9469
 <211> 423
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB30-001-Q1-E1-A5

 <400> 9469

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aactcgcggg acggacccgt gacctttgag cagccaaaga tgacagtgga gaagctgcta  180
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acctacatga gccaggcagc tctgggtgat gctaaccagg atgcgatgaa gactgggttcc  300
ttctacggtt agaacattct ccatacacac ccaccatctc ttgctgcata ggaggaggta  360
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 <211> 438
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
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<400> 9470

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 tctttcagat ctgtcaagat catccattgt aggcaaggaa tcagtgtaaa cgaaatggag 240
 cagagcctcg aaaaccaccg gttccatgag atcaacgggt atgtgccgca tcttgttctc 300
 cttcatgggt tcaacttagct gcgctttgaa aactggcgac ctggcagaga gcactgccct 360
 gtgggcagga aacattttct ctctaacttt gaaggtcaca tctgctctgg acttatcctt 420
 cagcatcttg ccaaaatg 438

<210> 9471
 <211> 404
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-A8

<400> 9471

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 ggaatcttga gaaagctatg gagcaaacca tggacaagtt cgatttcgag gttcgttggc 240
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 agaccaagtt tggccctgtg cagtttgagc gtgcaactgc tcgcatgaga gagatgttcc 360
 gaggacttgg ctttgaatat gacatgtcag gactcaccgg gaaa 404

<210> 9472
 <211> 319
 <212> DNA

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 acgaggtgga ggaggtcaag aaggagtacc ctgacgcgta tgtccgcac atcggattcg 240
 acaacatgcg ccaggtgcat tgcttcagct tcatcgctt caagccaccg ggctgccacg 300
 attccggcaa ggctaaaca gtcactcac cagggggcac atataaagtg ccattgccgt 360
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<210> 9475
 <211> 457
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB30-001-Q1-E1-B11

<400> 9475
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 tgcttgacaa gctcaaggcc gagcgtgaga gaggtatcac catcgatatt gctctctgga 180
 agttcgagac caccaagtac tactgcaccg tcattgatgc ccctggtcac cgtgacttca 240
 tcaagaacat gatcaccggg acctcccagg ctgactgtgc tgttctcatc atcgactcca 300
 ccactgggtg ttttgaggct ggtatctcca aggatggcca gacacgtgag cagccctcc 360
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<210> 9476
 <211> 436
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-B12

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 atggacatac acatattctt aggaacaagt aagagagaca aatggagaag gaaaacccaa 180

agcaatgtca gagttgacaa aactgcaatg gcactttata tgtggcccgt ggtgagtga 240
ctgttttaggc cttgccggac tcctcgcagc ccggtggcctt gaaggcaatg aagctgacgc 300
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tcttgacctc ctccagctcg ttgatcacct gtgtggcgtc ggtggcaccg aacataggca 420
gcttccacat ttgtca 436

<210> 9477
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-B2

<400> 9477

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cttaaaaaat aagtgtaaat aaagtagatt gcgatgctct tagagaaaag ccgatgtgta 180
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ttgtgtcgaa ttttatgttc tgcaagaaca acagatcc 278

<210> 9478
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-B4

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aaacagctca ctcaccacgg gccacatata aagtgcatt gcggttttgt caactctgac 360
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432

<210> 9479
<211> 436
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB30-001-Q1-E1-B5

<400> 9479

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tatggtgttc tgaatcagaa gagagggcac gtgtttgagg agatgcagag gcctgggtacc 360
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ctcaaggctg cgacat 436

<210> 9480
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-B7

<400> 9480

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cgcccatggc gagcctgatg gacaaggcca aggggttcgt cgccgacaag atcgcgacaca 180
tgcccaagcc ggaggcgtcg ctggacaagg tgaccttcaa ggcatgacc cgcgaggcca 240
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acatgcctt caacctcaag tgccggcgga aggaggtggc gagcggcacg atccccgacc 360
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acgacttctt catctctctc

440

<210> 9481

<211> 399

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-B8

<400> 9481

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ccatggcgga ccagctcacc gacgaccaga tcgccgaggt caaggaggcc ttcagcctct 120

tcgacaagga cggagacggc tgcataacca ccaaggagct tgggaactgtg atgcgctcgc 180

tggggcagaa ccccaactgag gcagagcttc aggatatgat caatgaagtg gatgctgatg 240

gcaatggaac gattgacttt cctgagttcc tcaacctgat ggcgcgtaag atgaaggaca 300

ctgattccga agaggagctt aaggaggctt tccgcgtggt tgacaaggac cagaatgggt 360

tcactctggc agctgaactc agccatgtca tgactaacc 399

<210> 9482

<211> 395

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB30-001-Q1-E1-B9

<400> 9482

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tacgacgacg aggtgcgcaa gtgggtgacc tctaccggtg tcgagaacat tggcaagagg 120

ctggtgaact cgcgggacgg acccgtgacc tttgagcagc caaagatgac agtggagaag 180

ctgctagagt acgggcacat gcttgtccag gagcaggaca atgtcaagcg tgtgcagctt 240

gctgacacct acatgagcca ggcagctctg ggtgatgcta accaggatgc gatgaagact 300

ggttccttct acggttagaa cattctccat acacaccac catctcttgc tgcataggan 360

gaggtaaagg ggcacagcaa ggtactttgc ctgta 395

<210> 9483

<211> 417

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB30-001-Q1-E1-C11

 <400> 9483

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 aggttcctttg cctgggtgaca cccaaacctg aagcgaaccc acgctgttcg ccgacccgtc 120
 cactgctgct cgggccagcc atgaggggtcc tcgcgttcct cctcctacta gggatctctg 180
 ccgccgccac tgcateccct ccgccgctcg agaccctcgg catccctccg caagatgagg 240
 cgtactacag gggcggcgtg atcaagtga gggacggatc gggcaagttc accagggatc 300
 agtcaacga cgacttctgc gactgtcccg acggcaccga cgagccaggg acatccgcgt 360
 gcccgagggc gaaattctac tgcaataatg ccggacattc tccaatcacc atcttct 417

<210> 9484
 <211> 442
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB30-001-Q1-E1-C12

 <400> 9484

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 acattggcaa gaggctggtg aactcgcggg acggacccgt gacctttgag cagccaaaga 180
 tgacagtgga gaagctgcta gactacgggc acatgcttgt ccaggagcag gacaatgtca 240
 agcgtgtgca gcttgtgac acctacatga gccaggcagc tctgggtgat gctaaccagg 300
 atgcgatgaa gactgggtcc ttctacggtt agaacattct ccatacacac ccaccatctc 360
 ttgctgcata ggangatgta aaggggcaca gcaagggtact ttgcctgtaa cggcaggatg 420
 caccgaccag actgccaaga ac 442

<210> 9485
 <211> 439
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-C2

<400> 9485

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ttaattcaag agttataggg agggacttat gtcaccacaa acagaaacta aagcaggtgt 120
tggatttaaa gctggtgtta aagattataa attgacttac tgcaccccag agtatgaaac 180
taaggatact gatatcttgg cagcattccg agtaagtcct cagcctgggg ttccgcccga 240
agaagcaggg gctgcagtag ctgccgaatc ttctactggg acatggacaa ctgtttggac 300
tgatggactt accagtcttg atcgttacaa aggacgatgc tatcacatcg agcctgttgc 360
tggggaagac agccaatgga tctgttatgt agcttatcca ttagacctat ttgaagaggg 420
ttccgttact aacatgttt 439

<210> 9486

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-C9

<400> 9486

cccggtcga caccttccca ggacaaacca tcgacttttt cggtgctctg cgtgctcggg 60
tgtacgacga cgaggtgcgc aagtgggtga cctctaccgg tatcgagaac attggcaaga 120
agcttgtgaa ctcgcgggac ggaccagtga cctttgagca gccaaagatg acagtcgaga 180
agctgctaga gtacgggcac atgctcgtcc aggagcagga caatgtcagg cgtgtgcagc 240
ttgctgacac ctacatgagc caggcagctc tgggtgatgc taaccaggat gcgatgaaga 300
ctggttcctt ctacgggttag aacattctcc atacacacc accatctctt gctgcatagg 360
aggaggtaaa ggggcacagc aaggtacttt gcctgtgccg gcaggatgca ccgaccagac 420
tgccaagaac ttcgacccaa cggcgagg 448

<210> 9487

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-D1

<400> 9487

ccgggcccgc tacctgatcc actacaagtg ggtgccttgc ctcgagttca gcaagggttg 60
gttcatcttc cgtgagcaca acgcatcccc tgggtactat gatggccggt actggacaat 120
gtggaagctg cctatgttcg ggtgcaccga cgccacacaa gtgatcaacg aggtggagga 180
ggtcaagaag gagtaccctg acgcgtatgt ccgcatcatc ggattcgaca acatgcgcca 240
ggtgcagtgc gtcagettca tcgccttcaa gccaccggac tgcgaggagt ccggcaaggc 300
ctaaacagct cactcacgac aggccatata taaagtgccca ttgcagtttt gtcaactctg 360
acattgcttt gggttttctt tctccattta tctttcttat ttgttcctaa gaatatgtgt 420
atgtccatgt tcatg 435

<210> 9488

<211> 455

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-D10

<400> 9488

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ttactgagac gacggcggag ctagcggcat cgctgtcggg ggcggtgcc cggaggatcg 120
ttgaggccga ccaattgatg agggctggcc tctacgacgg atgggtcccg cacctgtttg 180
ttgggaactt gctcaagggg cagactgttg gagtgatcgg agctggccgc atcggctcag 240
cttatgcaag gatgatgatt gaggggttca agatgaactt gatctacttc gacctgtacc 300
agtcacacg gctcgagaaa ttcgtcaccg cgtatggcca gttcctgaaa gccaatggtg 360
agcagcccgt gacatggaag agggcttcca gcatggagga ggtcctcagg gaggctgatg 420
tgataagcct gcaccaagtg ctggacaaga caacg 455

<210> 9489

<211> 335

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-D11

<400> 9489

gggtcgactc ggtgcttgta gatacccaag ggctttcagc aagagaaggt ggtgaccggc 60
aagatctcgg agatgcgata gtcgtcgtag ttgtagtggt ggtgcttgca ctgctagagt 120
tgtagaggaa cgcagcgtgc agcccaatcc tattatcaag ttgggctctg gtatgcaacg 180
gatgaaacgt ctgtgtaaag aactgtagtc tcaaggctctg tgtggtcagc taggtccgag 240
agtggtttgt gtgtcctcca gtcttcccat gggtaaattt ttttctcgcc ctgggtgcaa 300
attagacttt ggtgctgagg ataaaacccg ttgtg 335

<210> 9490
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-D12

<400> 9490

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acgacgacga ggtgcgcaag tgggtgacct ctaccggtat cgagaacatt ggcaagaagc 120
tggtgaactc gcgggacgga ccagtgcctt ttgagcagcc aaagatgaca gtggagaagc 180
tgctagagta cgggcacatg otcgtccagg agcaggacaa tgtcaagcgt gtgcagcttg 240
ctgacaccta catgagccag gcagctctgg gtgatgctaa ccaggatgag atgaagactg 300
gtaccttcta cggttagaac attctccata cacaccacc atctcttgct gcataggagg 360
acgtaaaagg gcacagcaag gtactttgcc tgtaccggca ggatgcaccg accagactgc 420
caagaacttc gacca 435

<210> 9491
<211> 445
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB30-001-Q1-E1-D2

<400> 9491

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tctgcgtgct cgggtgtacg acgacgaggt gcgcaagtgg gtgacctcta ccggtatcga 120
gaacattggc aagaagcttg tgaactcgcg ggacggacca gtgacctttg agcagccaaa 180

gatgacagtc gagaagctgc tagagtacgg gcacatgctc gtccggggagc aggacaatgt 240
 caagcgtgtg cagcttgctg acacctacat gagccaggca gctctgggtg atgctaacca 300
 ggatgcgatg aagactgggt cttctacgg ttagaacatt ctccatacac acccaccatc 360
 tcttgctgca tangangagg taaaggggca cagcaaggta ctttgctgt gccggcagga 420
 tgcaccgacc agactgcca gaact 445

<210> 9492
 <211> 373
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-001-Q1-E1-D3
 <400> 9492

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 agtctggtga ccgctacgcc ggcggaacga ccgggcttct tatctgggcc gtcaccctcg 120
 ccggcctcct cggcgggcgc gtctctctcg tctacaacac cagcgtctc gccggctaag 180
 agagcatcta cgtgtaacac agggccgggt ctctgcttgc atgcacgtct ctgtaatctg 240
 cgtagctacc tcctgtgaat gtatgcaatc aacgatgcaa agtaattgat ccgaacagat 300
 ggtttatgtg tatgtacgta acgctgttac gatatacttc ctactttgga aactgtaaaa 360
 ggggtggattc tcg 373

<210> 9493
 <211> 356
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-001-Q1-E1-D4
 <400> 9493

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 cggccttgcc aacttccgct gccatccgta tcgagggccc tcggggacgc cagcaggggt 120
 gtggggtgtc tgctgatgtt tgctgcttct tctccttccc tctactagctt ctccgctcgt 180
 gttgcttgc gccgccgact gataaactaa tccgtgaact gttgttgaag ggccgaatga 240
 gcaagactgc tgcaagatga aggtaacact ggcgaaacag caaatcatgg tccaggaaag 300

catatatgta cttattggcc atatccaggc atcttttggg cagtcggtg tgttct 356

<210> 9494

<211> 416

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB30-001-Q1-E1-D9

<400> 9494

gccctagaa acacttctct tcacccttca gttttgttaa ctctgettca tctttcgcaa 60

ttgccaattc ggccttttca acttcctgat tccgaataac gacaccactt ttatatgtag 120

ctacgtgctt ctttaacttc tccctcgccg ccttgccagc tccccagcat gtattcttgc 180

aagtgccatt gctaccgtat tcgtcactcc cgtcacagca atcgcatata ccatcattca 240

ctcgcgacga gaagatgggtg attggagaat gtccggtatt cttgcagtag aatttcgcct 300

ccgggcacgc ggatgtccct ggctcgtcag tgccgtcggg acagtcgcag aagtcgtcgt 360

tgagctgac ctggtgaact tgccgatccg tcccggcact tgatcacccg ccctg 416

<210> 9495

<211> 410

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB30-001-Q1-E1-E1

<400> 9495

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caggacaaca acataatgct gtggaatgct gtgatttttg gccctgacga tagcccgtag 120

gatggaggca cgtttaagct gactctccag tttaatgaag aatatacctaa taagccacca 180

acagttcggg ttattttctcg gatgtttcac cctaacattt atgctgatgg aagcatatgc 240

ttagatattc tacagaatca gtggagccca atatatgatg tagctgctat acttacatct 300

atccagtcgc tgctgtgtga tcccaaccca aattcgctg ctaactcaga agctgcccgc 360

atgttcagtg agaacaagcg agagtacaac cgcaaagtgc gggagattgt 410

<210> 9496

<211> 457

<212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB30-001-Q1-E1-E11

<400> 9496

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cggtcctatn ttcccgggtc caccatggcg gcagggaaat gttccatggc cacgccgacc 60
ccgtcgtcca cgagctcaac aggctggaga atctcctcag agaaaaggaa cgagaactag 120
gacacgcata cagtgaaata aaaggctctga aggtgacaga agctctgaag gacaaggcca 180
ttgctgagct gagcaaggag ctgaagaaac aggacgagag gctgagcatc ctggagaagc 240
agcttgagca gaagaatctg gatgtgaaaa ggatatgcaa tgagcgcaag gaagcgttgt 300
ctgcacagtt cgctgccgag gcatcgctca ggaggatcca ctcggctcag agagacgagg 360
aagtggttcc ctttgatgcc atcatagggc ccctggagtc tgacatcaag aagtacaagc 420
atgagattgc ggtgctccag gatgacaaaa agggctc 457

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<210> 9497
 <211> 271
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-001-Q1-E1-E12

<400> 9497

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gaaggcctca ggtggtggtg gtgatgacgg cgacgaggag gaagactaag cgcccagcct 120
caccgcata actttcgttg cagaaatggt gagattgcct tgtggaactc ggaaatgatt 180
caaactttcc ttcttagaaa cttaatggtg tagagctttc gttggttcag aatcttttgg 240
ctgtcgggtc taàaattaaa cttatgtgtg t 271

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<210> 9498
 <211> 385
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-001-Q1-E1-E2
 <400> 9498

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tcaagcaccc tgacattctg ctcgtcaata cagattctcg gggattgatt gacaaagcct 120
ggactcttg cataccgctg tttgtatcat attctgcgga tgattatgac caggaattta 180
tggattacaa ggtataacct tctaagtact tggggctacc ataatacttt aatcaatata 240
ttgaacagga taaagaatat acttcccagg gcgaagccat gctggtgaaa gcaagcagca 300
ttgctcgcac aatgctatac atggatctgg ggctagtaga ttagatgggt ataaacggaa 360
caatgtgcac ggagatgttg tgcta 385

<210> 9499
<211> 450
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB30-001-Q1-E1-E3

<400> 9499

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atagtacaaa agatacttct cttttcccta taaccttttg ggcgacttcg gtgcaaagct 120
tgccacagag aagtatcatt gtgctgacga tctgggctga atgccgcaga atgcaacagc 180
tgcattcatc actacagaat ggttgattta aggggcagtt gaagcaactt ttgggtaatc 240
attatcgggc tgcgcttccc attctgtcca agatccgtcg taaactggaa cgtcatgctt 300
accgattcta tagaggccca gggcaagtat gcaggcagtt acaccagatc cacatgtgac 360
gacaatcggg tgatcgagca aaatgccttc ttgctcaaac ttttttgata gctcatctgc 420
agggaggagc gtntgtgcac catcaaacat 450

<210> 9500
<211> 156
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB30-001-Q1-E1-E4

<400> 9500

tcaangattt acacatggat anaaatgact actatggagg agattccacc tccctcaact 60

tgaaccagct ctggaagaag ttcagggggg aagaaaaacc accggcgcat ttaggtgcga 120
gcagagacta caatgtagac atggttccag aggttt 156

<210> 9501
<211> 301
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-E5

<400> 9501

aattcgcggg ccgacggcta cagcccaatc tacacgccgg aggaatggtc tgaatctggt 60
gaccgctacg ccggcggaac gaccgggctt cctatctggg ccgtcaccct cgccggcctc 120
ctcggcgggcg gcgtcctcct cgtctacaac accagcgctc tcgccggcta agagagcatc 180
tacgtgtaac acagggccgg gtctctgctt gcatgcacgt ctctgtaatc tacgtagcta 240
cctcctgtga atgtatgtca tcaacgatgc aaagtaattg attcgaacag atggtttatg 300
t 301

<210> 9502
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-F1

<400> 9502

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ctgcaaggat gacggtggct gcaaacgaga aggcggaggc tgagaagatt gtccagatca 120
agcgtgccga gggatgaagca gaggccaagt acctgtctgg cctcggtatc gcccgccagc 180
gccaggccat tgtggatggc ctgagggaca gcgtcctggg cttctcagtc aatgtgcctg 240
gcaccactgc aaaggatgtg atggacatgg tgctgatcac ccagtacttc gatactatga 300
aagagattgg cgcgtcctcc aagtccctcg cggtgttcat ccccatggc cctggtgogg 360
tgcgcgacat cgccacgcag atccgtgacg gtcttcttca aggccagtct gcctctgaca 420
actag 425

<210> 9503

<211> 392
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB30-001-Q1-E1-F12

<400> 9503

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aattgactta ctacacccca gagtatgaaa ctaaggatac tgatatcttg gcagcattcc 180
gagtaagtcc tcagcctggg gttccgcccg aagaagcagg ggctgcagta gctgccgaat 240
cttctactgg tacatggaca actgtttgga ctgatggact taccagtctt gatcgttaca 300
aaggacgatg ctatcacatc gagcctgttg ctggggaaga cagccaatgg atctgttatg 360
tancctatcc attagaccta tttgaagagg gt 392
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<210> 9504
 <211> 420
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-F2

<400> 9504

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acggtaatac gatggatcaa gtgttcctgt cgtgatttgc agccgaaata gaatgtccat 180
aaccgacaac agcatcgacc gaagattcta gatcagaagg acaatgtcat gtctaagggtg 240
ctgtccgtgc catatgttct caatgcaact cgttgtcacc tttggaaaac tacattgaaa 300
gtcgggtcaa ccaacgtaac tgcaatctag acacatcgtg cttaactoga gatgtggaat 360
atcacctttt aggtctcatg actgctgctg tcgttcagca ggatgatgac acacgtagac 420
```

<210> 9505
 <211> 432
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-F5

<400> 9505

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gaaagtcaac tgtgctccag cgatcaagtg cattggggcca gaatttgtgc gtccccagag 180
ccaccgttgc tatecttcat cctgcatggg gactgcattt ccgaggttgc atgagatgga 240
tttattagaa ttggtggaat tggaggaatg ggaatgggat gaggaagtgc aagctatgtc 300
agtcatgggt gagcttactt tcacaagatg taatttgaag tgtatccctc ccggtcttgc 360
ctcacatgca aaggctttga taaagttaac cttgtggagc atgtggcgtc tccattcgct 420
agagaacttt gc 432

<210> 9506

<211> 380

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-F8

<400> 9506

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aattgactta ctacacccca gagtatgaaa ctaaggatac tgatatcttg gcagcattcc 180
gagtaagtcc tcagcctggg gttccgcccg aagaagcagg ggctgcagta gctgccgaat 240
cttctactgg tacatggaca actgtttgga ctgatggact taccagtctt gatcgttaca 300
aaggacgatg ctatcacatc gagcctgttg ctggggaaga cagccaatgg atctgttatg 360
tagcctatcc attagaccta 380

<210> 9507

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-F9

<400> 9507

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ggtggagact caagtgccgt tgcagcagca gctgcttcat ttcaatggca aggagatgaa 120
 caatgctgag aagctcagcg ccatcgaggt cgatgatggg gatcttgtga tgatgggtgc 180
 ctccaataat aggacatctc aggatattat gaggttaaata cctgatggat cggcagtaaa 240
 tcctcaagct ttccaacaac atattcgtgg cgattcaciaa cttatggcgc aactccttca 300
 gaatgacctt tcattagctc aagccatcct tggagatgac accactgagt tgcaaaacat 360
 cttgcgggtca caccaccaac aaagactaca actgaaacgc agacaggaag aagagcttgc 420
 cttattgtat gccgattcat ttgatgt 447

<210> 9508
 <211> 237
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-001-Q1-E1-G10
 <400> 9508

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 cgggagggac tgggtgacctt tgagcagcca aacatcacac tcgggaagct gccagactac 180
 gggcacatgc gcatccagga gcaggacaat gtccagcctg tgcagcttgc tgacacc 237

<210> 9509
 <211> 420
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB30-001-Q1-E1-G11
 <400> 9509

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 aacattggca agaagcttgt gaactcgcgg gagggaccag tgacctttga gcagccaaag 180
 atgacagtcg agaagctgct agagtacggg cacatgctcg tccaggagca ggacaatgtc 240
 aagcgtgtgc agcttgctga cacctacatg agccaggcag ctctgggtga tgctaaccag 300

gatgcatga agactgggtc cttctacggt tagaacattc tccatacaca ctcagcatct 360
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<210> 9510
 <211> 289
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-G12

<400> 9510

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 tgtgggggtg cgctgacgcc acacaggtgc ggaaggaggt ggatgaggtc acgagggagt 180
 accccgacgc ctatgtccgt gtcctcggct tcgatcgctt ggcgccggtg cagtgcgtcc 240
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<210> 9511
 <211> 376
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-G2

<400> 9511

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 aggatagaag ctggaattgg agccggagaa gctgatccag tgctttttta catggtctca 180
 tggagcacia gaaacaatgt tcattgtaat atgcgacgca caattatatc cgatgttata 240
 attggtgaag ctgaagacag atgtatccta tgtaaaaaaac aacgcagcaa cgaacattag 300
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 aaaaaaaaaag cggccg 376

<210> 9512
 <211> 447
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-G3

<400> 9512

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attgaatttg attttgctca catcgagtga acttgcgagg ctgcggtctc ttcttaaaaa 180
gtcattgggtg gatacttgtg ggaaggactt atttctatct ttatacgctt cttggtgcc 240
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tgttattcag tctctgggag aagaagacat aaatgtgaag tttctgggtgc agctagataa 360
attgatccgt ctattagaga ctccagtatt tgcttacttg cgtttacagc ttcttgagcc 420
tggaaaacac acttggcttc tgaaaac 447

<210> 9513

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-G4

<400> 9513

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actctgaaga ttatctttga tcatcgggca tgggatacac ggaccatgga gtctctatgc 120
cgatcttgca aatttgctgt aaggacatgt gggagggtcca tgggaatcac cattggtgca 180
atgctgctag aaatccaaac actatatcag caacacaatc agtcttgctt cctttactta 240
tccagtgaag ttattaagat atttggatct gatccatctt gtgcgagtta tcttacatgt 300
ctgatacaga cactctttta tcatacaata caactgctca gaactattca agattttaca 360
gctagaccg acatagctga tgattgcttt ctgcttgctg caagatgt 408

<210> 9514

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-G7

<400> 9514

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ggccggtact ggacaatgtg gaagctgcct atgttcgggt gcaccgacgc cacacaggtg 180
atcaacgagg tggaagaggt caagaaggag taccctgacg cgtacgtccg catcatcgga 240
ttcgacaaca tgcgccaggt gcagtgcgtc agcttcatcg ccttcaagcc accgggctgc 300
gaggagtccg gcaaggccta aacagctcac tcaccacggg ccacatataa agtgccattg 360
cggttttgtc aactctgaca ttgctttggg ttttccttct ccatttatct ttcttgtttg 420
ttcctaagaa tatgtgtatg tccatgttca tg 452

<210> 9515
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-G9

<400> 9515

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gcatgatggt ggtccatcaa ctggggggaa actgggtgtg ctcccgattg ttggcagcat 120
gggagtcggg aagaccaccc ttgcgcagca tgcggcgat gatgagaggg tgcgcaacca 180
cttcccaata attttgtatt ccaatttctc atacaccaga gcaatggctc gggatgaggc 240
ggtgtttgtt cttggatcca aacacacagt tggagatgct caaaaattca tcgagtcact 300
acatgtactt aaggagaaat gcctcaccaa gaggttcttg atggtatttg aagatgttga 360
catgggcaaa aaacagatgc tagaagagtt actgccaatc ttgagacatg gcagattcgg 420
gagcaggatc ataatcacca cagacaacgg ggatgtcgcc agcttg 466

<210> 9516
<211> 148
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-H11

<400> 9516

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cgaatacttt gatcatcgtg tgacaacaat aacggctgct tcaactgatgc gggcgctctgt 120
gacattgaga ccagctgggt tcacgggt 148

<210> 9517
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-H12

<400> 9517

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tctgtctcgg tagctttccc catttattgc aaccttctca aatctcaaga ttccaactgg 180
tcaaggaagt gaagaacaag gacagaagga catggatgcc ttaagttcaa tgctcgacaa 240
ggcgaaagac aaggtgaaaa gcaaccctga tgtgatggag aaagtcagtt cggtcctcga 300
caaggttaag aaccaccag aagtcatgga gaaagttgct gaagttttac atctgggaaa 360
acgtgaat 368

<210> 9518
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-H2

<400> 9518

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tgcgcaagtg ggtgacctct accggtatcg agaacattgg caagaagctg gtgaactcgc 120
gggacggacc agtgaccttt gagcagccaa agatgacagt ggagaagctg ctagagtacg 180
ggcacatgct cgtccaggag catgacaatg tcaagcgtgt gcagcttgct gacacctaca 240
tgagccaggc agctctgggt gatgctaacc aggatgcgat gaagactggg accttctacg 300
gttagaacat tctccatata caccacccat ctcttgctgc ataggaggag gtaaaggggc 360
acagcaagggt actttgcctg taccggcagg atgcaccgac cagactgcc aagaacttcga 420
cccaacg 427

<210> 9519
 <211> 438
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-H3

<400> 9519

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 ggcttcgtct tccgtgagca caacagctcc cccgggtact acgacggtcg atactggaca 120
 atgtggaagc tgcccatgtt tgggtgcacc gacgccacac aggtgctcaa cgaggtggag 180
 gaggtcaaga aggagtaccc tgacgcctat gtccgtgtca tcggcttcga caacctgcgc 240
 caggtgcagt gcgtcagctt catcgccctc aggccaccgg gttgcgagga gtccggcaag 300
 gcctaaacta cgagttgaaa caatggccta tctcgatga aggccttttg tgaacttcac 360
 ttttgtccac aactctgctg cagcactctg ctttcggacc ggagcatacc ttttgttcta 420
 tatgatttgt gtatgtat 438

<210> 9520
 <211> 367
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-H4

<400> 9520

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 aattgactta ctacacccca gagtatgaaa ctaaggatac tgatatcttg gcagcattcc 180
 gagtaagtcc tcagcctggg gttccgcccg aggaagcaag ggctgcagta gctgccgaat 240
 cttctactgg tacatggaca actgtttgga ctgatggact taccagtctt gatcgttaca 300
 aaggacgatg ctatcacatc gagcctgttt ctggggaaga cagccaatgg atctgtaatg 360
 tagctta 367

<210> 9521
 <211> 438
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB30-002-Q1-E1-A3

<400> 9521

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gtttatcttc cgtgagcaca acgcatcccc tgggtactac gatggccggt actggacaat  120
gtggaagctg cctatgttcg ggtgcaccga cgccacgcag gtaatcaacg aggtggagga  180
ggtcaagaag gagtaccctg acgcgtatgt ccgcatcatc ggattcgaca acatgcgcca  240
ggtgcagtgc gtcagcttca tcgccttcaa gccaccgggc tgcgaggagt ccggcaaggc  300
ctaaacagct cactcaccac gggccacata taaagtgcc ttgcggtttt gtcaactctg  360
acattgcttt ggggttttct tttccattta tctttcttgt ttgttcctaa gataagaata  420
tgtgtatgtc catgttac                                     438
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<210> 9522

<211> 424

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB30-002-Q1-E1-A4

<400> 9522

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ggttcacatt ccgtgagcac aacgcatccc ctgggtgcta tgatggccgg tactggacaa  120
tgtggaagct gcctatgttc ggtgcaccg acgccacaca agtgatcaac gaggtggagg  180
aggtcaagaa ggagtaccct gacgcgtatg tccgcatcat cggattcgac aacatgcgcc  240
aggtgcagtg cgtcagcttc atcgcttca agccaccggg ctgcgaggag tccggcaagg  300
cctaaacagc tactcacga caggccatat ataaagtgcc attgcagttt tgtcaactct  360
gacattgctt tgggttttcc ctctccattt aactttctta ttggttcta agaatatgtg  420
tatg                                             424
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<210> 9523

<211> 207

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB30-002-Q1-E1-A5

<400> 9523

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cagctaaaaa ccttttattg gatgtatcct gatgggttggg tgggcttagc ggctcacatt 180
ttggtgggtat tatgtacttg cttgaac 207

<210> 9524

<211> 374

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-A7

<400> 9524

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gtcgaggtcg agatgggtgg ctgcaaagct ccaattacca ccttcatagt tgagccgttt 180
gtccccacg atcaagagta ctaccttca gttgtgtccg aaaggttggg tagcaccatt 240
agcttctcgg aatgtggagg cattgaaatc gaggagaact gggacaaggt taagacagtc 300
tttcttccga ctgagaagcc aatgacacct gatgcttgtg ctcccttgat tgcaaccctt 360
ccactggacg cacg 374

<210> 9525

<211> 247

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-A8

<400> 9525

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gggtactggag aatgtgtgac ctgcgtaagt tcgggtgcac cgacgcaaaa caacttatca 120
acaacgtgga tgaggtaag aaggagtacc ccgatgcgta tgtccacatc atccgcttcc 180
acaacatgcg ccagggtcag tgcgtcagct tcagcacctt catcccaccg ggttgcgacg 240

agtcg

247

<210> 9526

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-A9

<400> 9526

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gcagccatgc acgctgtcat cgtcatcatt gccagatcgc tgctcatcgg gctgctatgc 180
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ctccagcatg cgtctccaa gatcgccga ctcttggct tgaccatggg gctcaacagc 300
gtgcagcctg tggtttcagg ggttgctgtt ggacgacgat ggcaaggcct tgttgcatc 360
atcaacctaa gctgctacta cgttctcgga ttgcccttgc gctaccttct cggctacaag 420
ttcaac 426

<210> 9527

<211> 374

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-B1

<400> 9527

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gagacggcgt cctcctcgtc tacaacacca gcgctctcgc cggctaagag agcatctacg 180
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tgtacgtaac gctgtaacca tatacttctt actttggaaa ctgtaaaaag ggtggattct 360
tgagccccg taaa 374

<210> 9528

<211> 433
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-B10

<400> 9528

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agaataatgt caatccaata caaaatacca gagtacgtcc atgtatcca agactgcaag 240
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aggaaccacc cctggttctt gaagaacttg ccaagagagc tcacggaagc tgccaagca 360
atgtactaca agagagacaa cagcgccccg acctactcgg tccagtcctg ggaggagatc 420
atgaagatcg tgg 433
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<210> 9529
 <211> 409
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-B11

<400> 9529

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agctgctaga gtacgggcac atgtttgtcc aggaccagga caatgtcaag cgtgtgcagc 240
ttgctgacac ctacatgagc cagcgagctc tgggtgatgc taaccaggat gcgatgaaga 300
ctggttcctt ctacggttag aacattctcc atacacaccc accaactctt gctgcatacg 360
aggaggtaaa tgcgcacagc aatgtacctt gcctgtatcg gcaggatgc 409
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<210> 9530
 <211> 404
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
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<400> 9530

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agcctgatgg ctatggtcga tgagcctctc tatccaattg ccgtgctgat agatgagctt 180
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gatgaagatg aggtgcttct tgcaatggct gaagaattgg gtgtgttcat tccttatgtt 360
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<210> 9531
<211> 442
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
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<400> 9531

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aggtaaaggg gcacagcaag gtactttgcc tgtaccggca cgatgcancg accagactgc 420
caagaacttc gaccaacgg cg 442

<210> 9532
<211> 445
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB30-002-Q1-E1-B4

<400> 9532

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gctggtgaac tcgcgggacg gacccgtgac ctttgagcag ccaaagatga cagtggagaa 180
gctgctagag tacgggcaca tgcttgtcca ggagcaggac aatgtcaagc gtgtgcagct 240
tgctgacacc tacatgagcc aggcagctct gggatgatgct aaccaggatg cgatgaagac 300
tggttccttc tacggttaga acattctcca tacacacca ccatctcttg ctgcatagga 360
ggaggtaaag gggcacagca atgtactttg cctgtnacgg caggatgcac cgaccagact 420
gccaagaact tcgaccaac ggcga 445

<210> 9533

<211> 451

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-B6

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aactgtccat ttacttcaa gattggagct tgctgcatg gcgatcgctg ctctcgcatc 180
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cattttgaag atttttatga ggatatcttt gaggaactga gcaagtttgg tgagattgag 360
accctcaacg tctgtgaaa cttttctgat cacatgatag gcaatgtgta tgtccagttc 420
agagaggaag atcaggcagc agcagctcat a 451

<210> 9534

<211> 295

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-B7

<400> 9534

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caccaaagtc cagcgtatca tgaccagcc catcaacctc atctttcggg tcctcagagc 180
aaagcgcgca tccagatctg gcttttcggg cagaaggata tgcggatcga gggtcgtatc 240
atcggctttg atgagtacat gaacctgggt ctcgaggatg ctgaggaaat caaca 295

<210> 9535
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-B9

<400> 9535

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gaaacctcgt ggggttgccc atcgtcgtgg tgcctacggg cttcaagagc atcgaacacc 180
caccaaaagg caacacgagg agacgaacca cagtgcgcac gggcatatat gctccccctg 240
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atcaacggcc accgattgac gcaaactaca acatacaca gtgattagcc ggctgatgaa 360
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<210> 9536
<211> 349
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-C1

<400> 9536

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tggtgcatg tgtgtcgtgc tggtcctgat gatccagctg caggcgccgg cggctgcgca 120
ggagatacca tgcgaccagt gcgggcccgg atgcgccag gcgtgcaatg cgcagggccc 180
ctacttctgc aacagcttct gcaacatctt tcccaccctg tgcaactact gcttcctcat 240
ccaatccggc ttgtgcattc gcgagtgcgc aaacctctgc aggtcaact gcgagttgat 300

gaccatgcac gaacgcatcg acatgcatgg attccagggt gtccatgag

349

<210> 9537

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-C11

<400> 9537

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gcaggttatt tgctaaaggc cttatgtgat gaaagttgga cgcttgact taaatctggc 120
ctccatcata ctactgacat gatacttggt ctttttgcag ctgcaaggat gaggggtggct 180
gcaaacgaga aggcggaggc tgagaagatt gtccagatca agcgtgccga ggggtgaagca 240
gaggccaagt acctgtctgg cctcggatc gcccgccagc gccaggccat tgtggatggc 300
ctgagggaca gcgtcatggg cttctcagtc aatgtgcctg gcaccactgc aaaggacgtg 360
atggacatgg tgctgatcac ccagtacttt gatactatga aagagattgg cgcgtcatcc 420
atgtcctctg cgggtg 435

<210> 9538

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-C3

<400> 9538

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tcgagaggtt cgagaaggaa gccgctgaga tgaacaagcg gtcgttcaag tacgcctggg 120
tgcttgacaa gctgaaggcc gagcgtgaga ggggtatcac cattgatatt gccctgtgga 180
agttcgagac caccaagtac tactgcaccg tcattgatgc ccctggtcac cgtgacttca 240
tcaagaacat gattactggg acctcccagg ctgactgtgc tgtgctcatc attgactoca 300
ccactggtgg ttttgaggct ggtatctcca aggatggcca gaccctgag caccgctcc 360
ttgctttcac tcttgagtg aagcagatga tctgctgctg caacaagatg gatgccacca 420
ctcctaagta ctcgagggt cggtatg 447

<210> 9539
 <211> 339
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-C4

<400> 9539

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 cagcacccaa gacgtgtcgt gtattgttgt gaggtgatat tgtaactgta agctagatac 120
 tacacaagag tgggtccggt ccctctgtcg ctagggcaat agcgtcgctt tgtcttggtt 180
 taccacaaca aggatgtttc tatatgatgt acaagatata cacacattgc tgggtgctgtt 240
 gctgttgtgg aagtgaagga cctgctgttc gtcgccgtgc caagttgggt taaaaagggt 300
 caaagttggt ggggtttgtca cgcaacctga atgtttgggt 339

<210> 9540
 <211> 344
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-C5

<400> 9540

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 acgacatcca ggccaagaag gttaacaccc tgatcaggcc tgatggcaag aagaaggcgt 120
 acgtgaagct gacaccagac tatgatgctc ttgacgtggc caacaagatc ggcatcatat 180
 aagtcagagg gacggctcctg cagtaggcgc ttgtgtcgtg gtttcttatg ttattggagt 240
 tttgtagttg ttacttagca aaggggtcga gtgggtccat tgcctaccat atcgccgcgc 300
 actttcatga atttgatgca atcgaagtga cttgtgttga tgcc 344

<210> 9541
 <211> 354
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-C6

<400> 9541

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 tgggaaggag atcgaaatcg acattgagcc caccgacacg attgatagga tcaaggagcg 120
 tggtgaggag aaagaaggca ttcctcctgt gcagcaaagg ctgatttatg ctggtaagca 180
 gcttgagat gacaagactg ccaaggacta caacatcgaa ggtggctcgg tcctccatct 240
 tgctcttgct ctgaggggtg gttactagtt aagctgtaat ggaaacgctt gcgtcctgag 300
 agaagtgacc attggtggca tggaacctgt gttgcaaaga aataataaca aact 354

<210> 9542
 <211> 331
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-C7

<400> 9542

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 gcggaacgac cgggcttctt atctgggccg tcaccctcgc cggcctcctc ggcggcggcg 120
 tcctcctcgt ctacaacacc agcgctctcg ccggctaaga gagcatctac gtgtaacaca 180
 gggccgggtc tctgcttgca tgcacgtctc tgtaatctac atagctacct cctgtgaatg 240
 tatgcagtca acgatgcaaa gtaattgatc cgaacagatg gggttatgtgt atgtacgtaa 300
 cgctgtgacg atatccctcc tactttggaa a 331

<210> 9543
 <211> 334
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-C8

<400> 9543

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 gaggatctcc gtcgccttgt tccatttggt cgctcgctgtc gtggagatgg ggacagaaag 120
 tggaagaggt ggagcgcaag tttgtttcga ttgggtttgt gcatattctc atcgggtgctt 180
 ggagtggagc tacggcgccc actggagctg ccggctctccg acgcctcccc ggtgaccttt 240
 ctggccgaaa ggcggcctgg tgaagccgct tcgtttcttc ctctgggctt gattccattt 300

gagatgcggc tgttcaactt caacatggag tcct

334

<210> 9544

<211> 317

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-C9

<400> 9544

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tgtcaccaca aacataaact acagcacgtg ttggatttaa agctgggtgtt aaagattata 120
aattgactta ctacacgccc atagtatgaa actaaggaga ccgatatctt ggcagcattc 180
cgagtaagtc ctcaacctgg ggttccgccc taataaccac gggctgcact acctgccgaa 240
tcttctaata gtcattgac aactgtttgg acttattgac ttaccactca tgatcgtcac 300
aaaggacaat gctatca 317

<210> 9545

<211> 376

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-D1

<400> 9545

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ttctctctcg tcttctctt gctggccgcc ggctctggag ctatgccgca ggacaagagg 120
attcacagga attatgttct tctcgatctc gatacaattg agatccgccc aaatggcaag 180
gaggaaatta gttctagcaa aattcatgtc tctgttgaga gtggcagcac aatatgtcta 240
acttgcgaga acttgacaaa taaagctgtc agttatctta gtgagaaaca aacacaagat 300
gagatcatgg agattcttca tgggtgcctgt tctcagacat tctccttaga acagaagtgt 360
cctgagatgg tggact 376

<210> 9546

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-D11

<400> 9546

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ggcagatctt tatggggcctt atggtgaacc ctctaaacc tggagacatc tcgtacctga 120
agtactctgc tgaaagtaag tctatccttg aatctttaag gaggagggca caaataatga 180
cagacggttt caatagttgc cgaaatgttg tctgcaattt cacagaagga gctatgtatt 240
ctttcccgca aatacggctg ccgcagagag ctatggatgt agcacagagc gctggcagaa 300
cgcacgatgt ttactactgc ctgaggcttc tggaatctac tggaatttac actgttccaa 360
gctcaagttt tggtc 375

<210> 9547

<211> 398

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB30-002-Q1-E1-D12

<400> 9547

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gttgaaagaa caaggtgatc cttgcaatga tttagatgaa gctttggaat gatataattg 120
aaataacttg gagctccgga aagaaaagat gaacaacttg gaaccgagaa tttgatatca 180
tgaacgaact ccgaaagaag gaataaatca cttggaggaa acaagaataa gaattatggt 240
atgcgatatcc ttcaccgata taaattgatg acaagcaacg gatttttgca tactacttat 300
tctcgtagaa aggattaaga tagatattgc gcaaacttgg gaaggctctc atcgaaccac 360
gggtaggatt ganacaacga ataaattgat atgataac 398

<210> 9548

<211> 389

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-D2

<400> 9548

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 cctccccctc acccggacaa tggagggcag ccttgatgca tgcaagctag ctaattcttc 180
 cacgtacggc caaagtcaac tatatatatt cgcaataata tgcgctcgat cgggtacttg 240
 ataataaaac ttgagtatgg ccctgctctc atgtgggtgt gtacttaa at ttttgtttgg 300
 aactttgggt gtgaacttaa ttagttacaa cgtgttatca ataaaactgc ttccgttcca 360
 aatcataata aaaaatactc cttttttcac 389

<210> 9549
 <211> 256
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-D3

<400> 9549

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 tcacacatga ggatgtgtac aagctggctg agacaattaa atcatcttca tgttgtaaga 120
 tcactcgtga acctggctct gtcaaggag ggtccactgt gattgctttt gcaacagacc 180
 cagatgggta catggctgaa cttaaccaga aggggtccgaa gcctgagcct ctctgtcaag 240
 ttatgcctcc tgttgg 256

<210> 9550
 <211> 403
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-D4

<400> 9550

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 ttcagcaagg ttgggttcat cttccgtgag cacaacgcat cccctgggta ctatgatggc 120
 cggtactgga caatgtggaa gctgcctatg ttcgggtgca ccgacgccac acaagtgatc 180
 aacgaggtgg aggaggtcaa gaaggagtac cctgacgcgt atgtccgcat catcggattc 240
 gacaacatgc gccaggtgca gtgcgtcagc ttcatcgcct tcaagccacc gggctgcgag 300

gagtccggca aggcctaaac agctcactca cgacaggcca tatataaagt gccattgcag 360
 ttttgtcaac tctgacattg ctttgggttt tccttctcca ttt 403

<210> 9551
 <211> 100
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-D5

<400> 9551

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 cctacggtac tgcgccttgc tcatcattgc acagcttaat 100

<210> 9552
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-D7

<400> 9552

gacgcgagaa gacaccagaa ggggatcgtc tctcgtctcg tcgaggaatc aacaaccatg 60
 ggcggtggca acgcgcagaa gtccaagatg gcgagggaga ggaacctcga gaagctgaag 120
 ggcggcaagg ggagccagct cgaggccaac aagaaggcca tgaacatcca gtgcaagata 180
 tgcattgcaga ctttcatctg caccacctct gaagcaaagt gcaaggagca cgccgaggcg 240
 aagcatccga agagcgacct cgtccagtgc ttccccacc tcaagccgtg atatctgcc 300
 gatcggacgg agagagagag aagctgccgt aatccagcta gtattatcat gttccgcaat 360
 gactggttgt tgacctaaagc atgggtctga actccggtgt gctgctgtcc cagctgcctt 420
 ggttgtgtgc ccatcta 437

<210> 9553
 <211> 425
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB30-002-Q1-E1-D8

<400> 9553

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 ggtgtacgac gacgaggtgc gcaagtgggt gacctctacc ggtatcgaga acattggcaa 120
 gaagcttgtg aactcgcggt acggaccagt gacctttgag cagccaaaga tgacagtcga 180
 ngaagctgct agagtacggt cacatgctcg tccaggagca ggacaatgtc aagcgtgtgc 240
 agcttgctga cacctacatg agccaggcag ctctgggtga tgctaaccat gatgcgatga 300
 agactggttc catctacggt tagaacattc tccatacaca ctcaccatct cttgctgcat 360
 acgatgatgt aaatgggcac atcatggtaa tttgcctgtg ccgggacgat gcaccgacca 420
 gactg 425

<210> 9554
 <211> 423
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-002-Q1-E1-D9
 <400> 9554

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 cgcagtgtgg cttgaccaac tccaactaca ccgagctgag ccagctgtac ccgaagtaca 120
 aggaccaagg ctttgagatc ttggctttcc catgcaatca gtttggtggg caggagcctg 180
 gcaccaatga tgagatcggt cagtttgcct gactcgctt caatgccgag taccctattt 240
 tcgacaacgt tgatgtcaat ggcaacaatg tttctccccg atacaagttc ctgaagtcta 300
 gcaaaggtgg ccttttcggc gacagcatca agtggaactt ctccaagttc ttggttgaca 360
 acgagggctg cgctgtagac cgctatgcac cgaacactat cccacctgag cattgacaat 420
 gat 423

<210> 9555
 <211> 337
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-002-Q1-E1-E1
 <400> 9555

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tgtcaccaca aacagaaact aaagcatgtg ttggatttaa agctggtgtt aaagattata 120
aattgactta cgacacccca tagtatgaaa ctaaggatac tgatatcttg gcaccattcc 180
gagtaagtcc tcagcctggg gttccgcccg atgaatcatg tgctgcaata actgccgaat 240
cttctactgg tacatggaca actgtttgga ctgattgact taccagtctt gatcggttta 300
aaggacgatg ctatcacatc gagccttggt gctgggg 337

<210> 9556
<211> 365
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-E2

<400> 9556

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cagagtacga ttaacctctg gatttgaaat cagtgccttat atacctggta ttggccataa 120
tttacaagaa cattctgtgg tattagtaat atgaggaagg gtttcggatt taccgggtgt 180
gagatatcgc attattcgag gaaccctaga tgctgtcgca gtaaagaatc gtcaacacgg 240
gcgttctaaa tatgggggtca gcacgccaaa ccaataagtg attttagccc ttatcaaaag 300
aaaacggatt cttgaacctc tttcacgctc atgtcacgtc aaggtagtgc agacaaaaga 360
actgc 365

<210> 9557
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-E3

<400> 9557

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ttgtgaactc gcgggacgga ccagtgcacct ttgagcagcc aaagatgaca gtcgagaagc 180
tgctagagta cgggcacatg ctcgctccagg agcaggacaa tgtcaagcgt gtgcagcttg 240
ctgacaccta catgagccag gcagctctgg gtgatgctaa ccaggatgcg atgaagactg 300

gttccttcta cggtaaaggg gcacagcaag gtactttgcc tgtgccggga tgatgcaccg 360
 accagactgc caagaacttc gacccaacgg cgatgagtga cgacggcagc tgcctttaca 420
 ccttttaagc atgcaaa 437

<210> 9558
 <211> 414
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-002-Q1-E1-E4
 <400> 9558

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 gctaaaacac tgggtctgaca atgctactcg agagtttgca ggttcggcct gggaggcatt 180
 gaagcatatc agacaggctg ttgatttctt ggtgatttct ctttaagccaa tgagaacact 240
 aagagagata cgtgctgatg tgtgccaaagc cctcagcata cagcagctag agcgcatagt 300
 tggatatgta ctggatgacg tcaatggttc agacactatt tcagcagagt tcgcatcaag 360
 cttgagagct gcaacgcgtg aggaagcaca tactggtcac aactttctct atac 414

<210> 9559
 <211> 211
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-002-Q1-E1-E6
 <400> 9559

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 aataaggtca ccctttaaac tgctgtcttg aatcaataac aaggcagaaa acacctggcc 120
 aaactgaaac atcttagtac ccaaaggaaa aaaaaaaca aaaaaaaaaa aaaaaagcgg 180
 gcgccccaaa agatataagc ctatatatac c 211

<210> 9560
 <211> 364
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-E7

<400> 9560

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tcctcaaggc catcaaggcc atgagtcctc tcaagcctat cccggtggtc gtcattgtcgt 120
cggagaacga gccccagagg atcagcagat gcctcaaggc tgggtgctgaa gattacatcg 180
tcaagcctct tcagagcaag gatgtgccgc gcctgaggag ctgctcgaac gcgaaacca 240
aggaccctcc atgcagcact gtgagcaaga gcgcggacca tatagctgct gtcgatggca 300
cgtcgtcgtc gctgccacgg cgagcacacc tcaccgatat tgccatggtc ctccactcgt 360
cgag 364

<210> 9561

<211> 397

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-E9

<400> 9561

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ggagagcttc acggttgacg cgttcatcgg caacgcgacc gactgggagc tcgtttgtct 120
gggaaacctc gtgggggttgcc ccatcgtcgt ggtgcctacg ggcttcaaga gcattcgaaca 180
cccaccaata ggcaacacga ggagacgaac cacagtgcgc acgggcatat atgctcccc 240
tgaccatgac cacattgctc tagcgttggc gatggcgtag cagtccgtca ccgatcacca 300
caaacaacgg ccaccgattg acgcaaacta gaaaatacac aagtgattag ccggctgatg 360
aaatggtatt gagaagaaaa ctccgtgtgc tgtttcc 397

<210> 9562

<211> 287

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-F1

<400> 9562

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catggattgg cgcctacgga tcaacttgact gggagtgaaa ttggaacgg gtatacttga 120
 cgatgaggat atcaatcact tgaaagatag aggtaatcat tcggttgccg atccggttaca 180
 agatcaagtc ggattggctc ttgggcggtg tacaacatgc agttcagaag accatttgta 240
 cagtactcat acgtcaatcg aagacgactc cccaaacggt ggtaact 287

<210> 9563
 <211> 271
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-002-Q1-E1-F10
 <400> 9563

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 aaggttaccg aataagatgt gtgattggct ttgcgcgtgt acccatacca gcatcgatcc 180
 tgtatcactt gtgtggtagt ttgcacaaaa cctgcttgaa aatgtttcat ggaaacttct 240
 ttgcctggcg atgatgcctg tattgaataa g 271

<210> 9564
 <211> 442
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-002-Q1-E1-F2
 <400> 9564

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 aaccgccact gtcatttggc tatgtcccat tgcttgatgt tctgagtgtt tcaaagtgtg 120
 gtcttagttg gcatgaaatg gtcaagttaa gtacatttct tcatgagacc tctgttcgag 180
 acctgaggtt ggggtttaaa tgcgaaaaga tttgggttca accagagtgt ctgacaaaaa 240
 ggctggcatc tgtgttccac caactaagga ttgtcaatct agttgacatt cctgaagggg 300
 atgatctcac ctggacaatg ttcatTTTTGg aagcgggtgcc gtccctagag gagttctaca 360
 tgacggtaat ggaccatcct tgtgaaatgc aatggatcac gagaaaagga gggcaagttg 420
 tatatcgacg acaaaggtgt ga 442

<210> 9565
 <211> 375
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-F4

<400> 9565

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 cctatgttcg ggtgcactga cgccacacag gtgatcaacg aggtggagga ggtcaagaag 180
 gagtaccctg acgcgtatgt ccgcatcatc ggattcgaca acatgctca ggtgcagtgc 240
 gtcagcttca tcgccttcaa gccaccgggc tgcgaggagt ccggcaaggc ctaaacagct 300
 cactcagcagc aggccatata taaagtccca ttgcagtttt gtcaactctg acattgcctt 360
 ggggttttcc cttct 375

<210> 9566
 <211> 413
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-F5

<400> 9566

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 aattgactta ctacaccca gagtatgaaa ctaaggatac tgatatcttg gcagcattcc 180
 gagtaagtcc tcagcctggg gttccgcccg aagaagcagg ggctgcagta gctgccgaat 240
 cttctactgg tacatggaca actgtttgga ctgatggact taccagtctt gatcgttaca 300
 aaggacgatg ctatcacatc gagcctgttg cctgggacga cagccaatgg atctggtagg 360
 tagcttatcc attagaccta tttgaagagg gttccgttac taacatgttt act 413

<210> 9567
 <211> 450
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-F6

<400> 9567

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attctagtgt ttgacttggg tggcgggtact tttgatgtct ctgtattgga gggtggagat 180
gggtgtatttg aggtgctttc cacatctggg gacacacact taggtggaga tgactttgat 240
aagaaaattg tagattggct tgctagcacc ttcaagaatg atgaaggcat cgatcttctt 300
aaggataaac aagcccttca gcgtcttact gaggcagcag aaaaagctaa gatggaattg 360
tcaacgctca cacaggcgaa cattagcttg ccattcataa ctgctactgc tgatgggccc 420
aaacacattg aggcaaccct ctctagagct 450

<210> 9568

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-F7

<400> 9568

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agaagctggt gaacgcgcgg gacggaccag tgacctttga gcagccaaag atgacagtgg 180
agaagctgct agagtacggg cacatgctcg tccaggagca ggacaatgtc aagcgtgtgc 240
agcttgctga cacctacatg agccaggcag ctctgggtga tgctaaccac gatgcgatga 300
agactggtac cttctacggt tagaacattc tccatacaca cccaccatct cttgctgcat 360
atgacgacgt aaaggggcac agcaacgtac tttgcctgta ctgggatgat gcaccgacca 420
gactggcaag aacttcgacc caacg 445

<210> 9569

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-F8

<400> 9569

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tgaggggtggc tgcaaacgag aaggcggagg ctgagaagat tgtccagatc aagcgtgccg 120
aggggtgaagc agaggccaag tacctgtctg gccctcggtat cgcgccgag cgccaggcca 180
ttgtggatgg cctgagggac agcgtcctgg gcttctcagt caacgtgcct ggcaccactg 240
caaaggatgt gatggacatg gtgctgatca cccagtactt tgatactatg aaagagatcg 300
gcgcatcctc caagtctcgc gcggtgttca tcccccatgg ccctgggtgcg gtgcgcgaca 360
tcgccacgca gatccgccat ggtcttcttc aaggccagtc tgcctctgac aactagcagt 420
tggctttgcc ggcatgaact tt 442

<210> 9570

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-G1

<400> 9570

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gataggctct cccacaaaga gccgcattgc cttgatgtag ttgtcactat ccaatgtaaa 120
gcggtgatac attcctgcag gcaaaacaat catgccacct ttcttaactg ctatacggat 180
ccactgttcg ttttgggtccc tcacatcaaa gtatccactg ccctcgagac aatagcgtat 240
ctcttcatca gtatgcaagt gctcttcaaa gaagttcttc agcttggcct catagtttgg 300
caacttctct ggacatacgt cgcaaagtgc cacataagag tatcccctgt cctcacggat 360
tttcttgaga ttctcgtctt tctcccagtc atcagcattc atgtttcacc ttacaacacc 420
caattctgac catttggca 439

<210> 9571

<211> 437

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB30-002-Q1-E1-G10

<400> 9571

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ggtgtacgac gacgaggtgc gcaagtgggt gacctctacc ggtatcgaga acattggcaa 120
gaagctggtg aactcgcggtg acggaccagt gacctttgag cagccaaaga tgacagtgga 180
gaagctgcta gagtacgggc acatgctcgt ccaggagcag gacaatgtca agcgtgtgca 240
gcttgctgac acctacatga gccaggcagc tctgggtgat gctaaccatg atgcgatgaa 300
gactggtacc ttctacggtt agaacattct ccatacacac ccaccatctc ttgctgcata 360
ngaggaggta aaggggcaca gcaacgtact ttgcctgtna cggcatgatg caccgaccag 420
actgccaaga acttcga 437

<210> 9572

<211> 432

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-G3

<400> 9572

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agctcctcct catcggcgac tccggcgtcg gcaagagcag tctcctcctc cgattcacat 120
ccgactcatt cgaggaccta tccccaacca tcggcgtgga cttcaagggtg aagatggtta 180
acattgccgg caagaagctc aagctcgccg tctgggacac cgctggacag gaacggttta 240
ggaccttgac cagctcttac tacacacggg cacaagggat catcatgggt atgtacgatg 300
ttactcgccg agaaacattc accaatctct ctgacatatg ggccaaggaa attgacctgc 360
attcgaccaa ccaggactgt gtaaagatgc ttgtcggaaa caaagtggac aatgaaaatg 420
agagggctgt ca 432

<210> 9573

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-G4

<400> 9573

gactacctga tccactacaa gtgggtgcct tgcctcgagt tcagcaaggt tgggttcac 60
 ttccgtgagc acaacgcac tccctgggtac tacgatggcc ggtattggac aatgtggaag 120
 ctgcctatgt tcgggtgcac tgacgccaca caggtgatca acgaggtgga ggaggtcaag 180
 aaggagtacc ctgacgcgta tgtccgcac atcggattcg acaacatgcg tcaggtgcag 240
 tgcgtcagct tcacgcctt caagccaccg ggctgcgagg agtccggcaa ggcctaaaca 300
 gctcactcac gacaggccat atataaagtg ccattgcagt tttgtcaact ctgacattgc 360
 tttgggtttt ccttcccat ttatctttcc taattgttcc taagaatatg tgtatgtcca 420
 tgttcat 427

<210> 9574
 <211> 456
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB30-002-Q1-E1-G5

<400> 9574

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 tctgctgct cgggtgtacg gcgacgaggt gcgcaagtgg gtgacctcta ccggtatcga 120
 gaacattggc aagaagcttg tgaactcgcg ggacggacca gtgacctttg agcagccaaa 180
 gatgacagtc gagaagctgc tagagtacgg gcacatgctc gtccaggagc atgacaatgt 240
 caagcgtgtg cagcttgtcg acacctacat gagccaggca gctctgggtg atgctaacca 300
 ggatgcgatg aagactggtt ccttctacgg ttagaacatt ctccatagac acacaccatc 360
 tcttgctgca tatgatgagg taaaggagca cnagcatgta ctttggcctg tgccgggagg 420
 atgcaccgac cagactgcca agaacctcga cccaac 456

<210> 9575
 <211> 375
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-G7

<400> 9575

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cgatcggaac aagtacaagt caatgcttat ccgtacatat tctactgtgt ggatgattgg 120
 cggtcttgca ttcctagttt atatgggcca tctttatatac tgggccatgg tggttgtcat 180
 tcaaataattc atggcgacag agcttttttaa tctactcaga aaatccagtg aagagaaaca 240
 actgccaggg ttcaggctcc cgaattggca cttctttttc acggcaatgt tgtttacata 300
 tggacgcttt cttagtcggg agcttggttaa cacagtatct tcagatcact tgttgataa 360
 gctcgtcagc agcct 375

<210> 9576

<211> 383

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-G8

<400> 9576

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 tgtcaccaca aacagaaact aaagcagggtg ttggatttaa agctgggtgtt aaagattata 120
 aattgactta ctacacccca gagtatgaaa ctaaggatac tgatatcttg gcatcattcc 180
 gagtaagtcc tcagcctggg gttccgcccg aagaatcagg ggctgcagta tctgccgaat 240
 cttctactgg tacatggaca actgtttgga ctgatggact taccagtcac gatcggtaca 300
 aaggacgatg ctatcacatc cagcctgttg ctggggaaga cagtcaatgg atctgttacg 360
 tagcttatcc attagaccta ttt 383

<210> 9577

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-H10

<400> 9577

gcctccacct cccacctcat cgccgcccga ggctttgact ccatcgctc ctccctctc 60
 ctcttcgtct ccggcaggcc aggtagttaa cagctccagc agccatggga aaggataaga 120
 tccacatcag cattgtggtc attggccatg ttgactctgg caagtcaacc acgactggcc 180
 acctcatcta caagcttgga ggcattgaca agcgtgtgat cgagagggtc gagaaggaag 240

ccgctgagat gaacaagagg tctttcaagt atgcctgggt gcttgacaag ctcaaggctg 300
 agcgtgagag gggatcacc attgatattg ctctctggaa gttcgagacc accaagtact 360
 cctgcactgt cattgatgct cctggtcacc gtgatttcat caagaacatg a 411

<210> 9578
 <211> 322
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-H2

<400> 9578

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 ggatccctca tcgaaggatt cgggaggaa gccgaaggtc cggacgcata tcggacacag 180
 cttcgtcagc ggatgtccca ggatttcctg ttgacgaacc tggaagagcg gaggcgagcc 240
 gccgacgatg tatgcagtga cccagcctct aaaaaggcca tgttgggtcc gcatgtgctg 300
 accgttggag aaacaatggg ac 322

<210> 9579
 <211> 432
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-H3

<400> 9579

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 ctctgtcatg cctgtttggg ttatctatat ctttctttgg attctcctgc agacggggcca 120
 tctctgctac tggatttacg gtgctcggtg tagtgaacaa gtcgtgacc gtcgtgatca 180
 atctgcgtat ctgggacaag catgcgtccc ttgtggggac aattgggctc ttgatatgca 240
 tgtctgggtg tgttctctac cagcaatcga ccagatagcc caaggtgccc aagatcgagc 300
 caaacgaaga ggactatgaa gacgggcaga atttgctgca cattcagccc gggcatgaga 360
 gcagcccaag tcaaaatcat tcctcatatg cctactttac cttccctcgg caacctattc 420
 gtggtatata tc 432

<210> 9580
 <211> 333
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-002-Q1-E1-H4
 <400> 9580

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 ccaagctagc acagcgttga tagtgagtt catgacagtc ttgattagct tgagatcatc 180
 aaggctgaag cgtcgatgca cgaagcgtt ggcacggcga gacccgctgg catctggcat 240
 atgctgaac atcgtacggg gatctctcaa gaacagtacc gtcgcagcat gcagtgcgac 300
 atccagcagc gtgtgccatg ccagcacaag ata 333

<210> 9581
 <211> 401
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-002-Q1-E1-H5
 <400> 9581

gtgcctctag cgtagaatgc ttgctcatga cgtgacgaac ttagagtcgt ctgagagttt 60
 ggataatcat ctgacttagt atacctgagt attggccata atttagaaga acattctgtc 120
 gtattagtaa gatgaggaaa ggttaaggat ttacccggtg tgcgatatca cattagtcaa 180
 agaaccctag atgctgtcgc aatagtcaat cgtcaacaac ggcgttctaa atatgtggtc 240
 aaaacaccac tgggttaagt gatttttagcc cttataaaaa caggatcgat tcatgagcct 300
 cttacacgct catgtcacgt agaagtactg catacaaaaag aactggaaaa tgggatacac 360
 tttgtcgtaa tccattagtt aacatggtgg ttaaccatat t 401

<210> 9582
 <211> 443
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-002-Q1-E1-H7

<400> 9582

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gggtgtacga cgacgaggtg cgcaagtggg tgacctctac cggatatcgac aacattggca 120
agaggctggt gaactcgcgg gacggaccgc tgacctttga gcagccaaag atgacagtgg 180
agaagctgct agagtacggg cacatgcttg tccaggagca ggacaatgtc aagcgtgtgc 240
agcttgctga cacctacatg agccaggcag ctctgggtga tgctaaccag gatgcgatga 300
ggactgggttc cttctacggt tagaacattc tccatacaca cccaccatct cttgctgcat 360
acgaggaggt taatgggcac agcaaggtag ttgacctgta ccggcacgat gcaccgacca 420
gactgccaag aacttcgacc caa 443

<210> 9583

<211> 329

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-H8

<400> 9583

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ttcgcagcaa tacatgtcat tcacattcaa ctagaagtgc ctaagttccg ttttgagtgg 120
cagggtctaag ggtgcgttct tcaatgtcaa tgaaagcgta ttcgtaaaaa tagttggaag 180
aagaagactt aattttccat agtacaatct tattcttttag taaaatcaag atcattttcg 240
agcgggtgatg aacatctaaa accaaagggt ttttctgggc aacatccaaa taataagatt 300
tttgaataac atgaattgac ttatcaca 329

<210> 9584

<211> 256

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-H9

<400> 9584

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ctatcgcgtc cactcgcgct gagaataaca ctttgatact gatgcagatg gcatgaccat 120

gcctctcacg ataggcatga aaattttcga tcagtcgagg tttcgtcaca ctatcgattc 180
 ttgctagccc attgccccat aaaacttgtc atctcccccc gccatccgta caatctcatc 240
 cctccccctc cttttg 256

<210> 9585

<211> 389

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-G6

<400> 9585

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 gagttcttgg ctccgtgccg tgaaagcctc aagaagaacg cgcttaggat taggtcagca 120
 tcagcttctc accctcctcc ctgcttgctc cgagatgcc a tggttaacgc caacgagttg 180
 tagcactcgt ttcagacctt acttgacctg ttttgacctg agtaagctta agctgaaact 240
 ggtaactgac gtgtcgtgtg tggctgtgtg ccaatagctt gtttatctgt ttattactgc 300
 tgtaaatgct gtacttaaaa aatgtaacaa tctaattgtc ccgtgtgctg acaaggttgc 360
 cagaaaaaaaa aaagacgggc ggaggaaaa 389

<210> 9586

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-H6

<400> 9586

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 tggcgcaaag tctacaagga catcgccctc aagcacgccg ggcagcgcgt cggagttttc 120
 tactgcgccg cgccggtgct gatcaaggag ctgcgccagc ttgcccaaga tttctcgagg 180
 aagacgagca ccaaattcga gttocacaag gagaatttct aactttgcag ccagcccagt 240
 cacaagaagt tcctcctttt tttttagaaa agaaacaagt ttctcttttc gcgaggaaaa 300
 agtctgttaa ttcagtacat acccagttct atagatggaa gtaggtgttg gttgattttc 360
 acaagctggg tcaagagtta catcgatttt tttgcctaac aaaaacacaa gaagtcg 417

<210> 9587
 <211> 343
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-H7

<400> 9587

attcgcgggc cgacatcggc aggagcgtca tccatggaag cgactcagtt gagagtgcga 60
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 actggatcta tgaggcctaa gatgtgtcat gagtggttga gtgcagggtt cattaagcat 180
 ctaccaaact agtctttggt tgtttacagt ttgagattt gtatcttggg aaccttggtt 240
 gtgtgaactg aagttatctc cttgtgcttg ggcattccaag cggatatctgc tgctctatat 300
 ttgatatatg gtattgctgt aaaaataaaa aagggcacta caa 343

<210> 9588
 <211> 264
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB30-001-Q1-E1-A12

<400> 9588

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 ttcgtgtgtt gcttatatta tatgttgcta ttatattacc attattaagt gagggaggaa 120
 ttgattagtg ccagtgtttg attttgttct gtttgtcatg gtacgaggaa agattaccga 180
 gtagataagg tctagtagca gtttcgctgt acctaatcag tacccttggt tcattccgac 240
 tagtaagtaa aaacttggtt ttcc 264

<210> 9589
 <211> 357
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-A6

<400> 9589

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 cgacaagatt ggcaaaatgt tggatgaagtc tcggtacgga tgcatagaact ttgagcaggt 180
 aatgatgaca gtggagaagg tgctaaagta ctggcatatg cctgacgacc accacgacag 240
 tgtcaagcgt atgcatcatg ctgacaccta catgatcaac gcatttctgg gtgatgctaa 300
 ccaggattcg atgaaggctg attcattcca ctcgatacac attctccata cactgcc 357

<210> 9590
 <211> 423
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-C1

<400> 9590

gcgacgcaga aaacggcgac tcttacgcaa tagcattgta tttggaggac aagtaccctc 60
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 ttgtgtgttc tggatttcaa cctcttcaca atctcacctt ggtgagattt atcgagcaaa 180
 aagttggaac aggggagagc atcccgtagg tcaaacaaca gattgataga ggtttcacag 240
 ctgttgagaa catgatcaaa ggctgtgctg ggaagtttgc tatgggagat gaagtccaac 300
 tggcagatgt attccttgca cccagattt ttgctgcggt gactcggtat caaatcgaca 360
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 aag 423

<210> 9591
 <211> 476
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-C10

<400> 9591

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 ctctgcgtgc tcgggtgtac gacgacgagg tgcgcaagtg ggtgacctct accggtatcg 120
 agaacattgg caagaggctg gtgaactcgc gggacggacc cgtgacctt gagcagccaa 180

agatgacagt ggagaagctg ctagagtacg ggcacatgct tgtccaggag caggacaatg 240
tcaagcgtgt gcagcttgct gacacctaca tgagccaggc agctctgggt gatgctaacc 300
aggatgcgat gaagactggt tccttctacg gttagaacat tctccatata caccaccat 360
ctcttgctgc ataggatgag gtaaaggggc acagcaaggt actttgcctg ttacggcagg 420
atgcaccgac cagactgcca ggaacttcga cccagcggcg aggagttacg accgga 476

<210> 9592
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-C3

<400> 9592

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cgatactgga caatgtggaa gctgcccattg tttgggtgca cgcacgccac acaggtgctc 180
aacgaggtgg aggaggtcaa gaaggagtac cctgacgcct atgtccgtgt catcggcttc 240
gacaacctgc gccaggtgca gtgcgtcagc ttcacgcctc tcaggccacc gggttgcgag 300
gagtccggca aggcctaaac tacgagttga aacaatggcc tatctcgat gaaggtcttt 360
tgtgaacttc acttttgtcc acaactctgc tgcacgactc tgctttcgga ccggagcata 420
ccttttgttc tatatgattt gtgtatgta 449

<210> 9593
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-C5

<400> 9593

gtacctatca ggaattcccg ggccgacgac atactggaac tcatcggtga tcaactgcat 60
gggtgcatcg gccagctaac agaggactgg ggggaagtgc tcttctctgc gctcaagcgt 120
gccggcggga cagccttcag caacatggcc gtcggttaca acaacgttga tgctgatgct 180
gccaacagga atggcatcgc catcggaac acgcctgggtg ttcttactga gacgacggcg 240

gagctggcgg cgtcgctgtc ggtggcggct gcccgaggga tcgttgaggc cgaccaattt 300
 atgagggctg gtctctacga cggatggctc ctgcacttgt ttgttgggaa cttgctcaag 360
 gggcagactg ttggagtgat cggagctggc cgcacggct cagcttatgc aaggatgatg 420
 a 421

<210> 9594
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-001-Q1-E1-C6
 <400> 9594

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 cggtcgatac tggacaatgt ggaagctgcc tatgttcggg tgcaccgacg ccacacaggt 180
 gctcaacgag gtggaggagg tcaagaagga gtaccctgac gcctatgtcc gcgtcatcgg 240
 cttcgacaac ctgcgccagg tgcagtgcgt cagcttcacg gccttcaggc caccggggtg 300
 cgaggagtct ggcaaggcct aaactacgag ttgaaacaat ggcctatgta tgaaggctct 360
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 tatggtctgt gtatgtatgt acgaacat 448

<210> 9595
 <211> 451
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-001-Q1-E1-C7
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 gccggcggga cagccttcag caacatggcc gtcggttaca acaacgttga tgtcgatgct 180
 gccaacagga atggcatcgc catcggaac acgcctggtg ttcttactga gacgacggcg 240
 gagctggcgg cgtcgctgtc ggtggcggct gcccgaggga tcgttgaggc cgaccaattt 300

atgagggctg gtctctacga cggatggctc ctgcacttgt ttgttgggaa cttgctcaag 360
 gggcagactg ttggagtgat cggagctggc cgcacggct cagcttatgc aaggatgatg 420
 attgacgggt tcaagatgaa cttgatctac t 451

<210> 9596
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-001-Q1-E1-C8
 <400> 9596

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 tgggtctcaga aacatcctga tttccgggtg accatctcaa gcagtccgtg tcttcatcag 180
 atttctgtat tcttcacgct ttgagcagga tgagatgaag aaatacgccc ttcatttgct 240
 cgtactctct catgtttact cgttacaatc tctgaagatc gtctgtaccg accagctcga 300
 gaggtttttt ctgcctcctg ataacgcggg ggacgttcta caacttgacac ggctatgtga 360
 cgcaccaagg ctctcactca tctgtactcg tatgatcact ggagatttca agaccatctc 420
 tctgtcagaa ggggtggaaag tgatgaga 448

<210> 9597
 <211> 444
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-001-Q1-E1-D5
 <400> 9597

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 agggcagcag tagttttagt ttgtcttggc ttcatgccgt ggtctggcgt tatgccgtgg 180
 ggatgcaaac cactggagct ctgcagcggc gtctgggtgg ggctccgctc gttttctttc 240
 ttgccaccat ggtggtggaa agtgggaagac gccggatctg gcaagatccc cttgaataag 300
 ctgccttctg tggtgtgggt ttccctgatc tggagggcat ccaactgcta ctgcttgttt 360

tctcaggcta ccatggtggt ggatgagaag caggatagtt gcagaatcct gaagtttata 420
 ggtcaggttc gagcatatca gcag 444

<210> 9598
 <211> 391
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-001-Q1-E1-D6
 <400> 9598

gtaccggact agaattcccg ggccgacgga cacaaccaag gcggcactct agatgaacgt 60
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 ctgctcgga tcttctgcag gtgcggcttc ctgctccaca ccatcatcac tcgcaccggt 180
 caacacaaca tccacgtgta acacatggcc gggctcttga atgcaagcac ctctgtatat 240
 gccacaaacc tagctcctgt gaatttatgt atgtatgcac gcagtgtaac agatcgtagt 300
 atattctgaa tgtgtatatc agtatctctg ttacgatgaa tctcctatct aacaacgtta 360
 agaggagatt ctctgcaaga gcttaggtgt t 391

<210> 9599
 <211> 265
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-001-Q1-E1-D7
 <400> 9599

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 ctgagaataa atttttgtgt ggaattatgt cagctaaaaa ccttttattg gatgtatcct 180
 gatggttggt tgggcttaga gctcacattt tgggtgtatt atgtacttgc ttgaactaaa 240
 tcatgagtca ttttactca tcttc 265

<210> 9600
 <211> 454
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
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<400> 9600

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gagttcagca aggttggtt cgtctttcgt gagcacaaca gctcccccg gtactacgac 120
ggccgatact ggacaatgtg gaagctgcct atgttcgggt gcaccgacgc cacgcaggtg 180
ctcaacgagg tggaggaggt caagaaggag taccctgacg cctatgtccg cgtcacgggc 240
ttcgacaacc tgcgccaggt gcagtgcgtc agcttcacg cattcaggcc accgggttgc 300
gaggagtctg gcaaggccta aactacgagt tgaagcaatg gcctatgtat gattgtcttt 360
tgtgaacttc acttttgtcc aggactctgc tttccgacca gagcatattt ttcgttcggt 420
atgatctgtg tntgtacgaa cataggttgt ggag 454

<210> 9601

<211> 337

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-E10

<400> 9601

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ctgaatctgg tgaccgctac gccggcgga cgaccggggt tcttatctgg gccgtcacc 120
tcgccggcct cctcgcgggc ggcgtcctcc tcgtctacaa caccagcgct ctgcgccggt 180
aagagagcat ctacgtgtaa cacagggcgg ggtctctgct tgcatgcacg tctctgtaat 240
ctacatagct acctcctgtg aatgtatgca atcaacgatg caaagtaatt gatccgaaca 300
gatggtttat gtgtatgcaa aagaaaaaga gactcac 337

<210> 9602

<211> 179

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-E6

<400> 9602

ggtaccgatc aggaattccc gggccgaccg acagaagagg tcccacactt cacaaatccc 60

caccaatcga acacacactc ctcccggctc cctcaaatgg cgctcctcgc tgtcaagggc 120
 atggccattt caacggcggc cttccctggg aacaacaacg gggccttacc ttctcctcc 179

<210> 9603
 <211> 351
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-E7

<400> 9603

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 ctctgcgccc tcgccgtccg cgcatcaacc gatttcgcac gcaatgtctc agactgttga 120
 actcaggggtt ggcattgtcat gtgagggatg tggtggagct gttaagcggg ttcttggcaa 180
 aatggaaggt gttgagtcct tcgatgtaga catcaaggag cagaagggtca ctgtgaaggg 240
 taatgtgacg ccggatgctg ttctgcagac tgtttcgaag acaggcaaga agacatcggt 300
 ctgggagggt gaaccctcgg catctgctgt ttcgtcctaa aagacgcac t 351

<210> 9604
 <211> 433
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-F3

<400> 9604

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 atcttcatgg gacttatggt gaaccctcct aaacctggag acatctcgta cctgaagtat 120
 tctgctgaaa gtaagtctat ccttgaatct ttgaggagga gggcacaaat aatgacagac 180
 ggtttcaata gttgccgaaa tggtgtctgc aatttcacag aaggagctat gtattctttc 240
 ccgcaaatac ggctgccgca aagagctatg gatgtagcaa aaagcgctgg caaagcggcc 300
 gatgtttact actgcctcaa gcttctggaa gccactggaa tatccactgt tccaggctca 360
 ggttttggtc agaaagaagg ggtgttccat ctgaggacga cgatcctgcc cgcggaggaa 420
 gacatgccgg cga 433

<210> 9605
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-F6

<400> 9605

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gccttacgta aagttgccag agtacgatta acctctggat ttgaaatcac tgcttatata 120
cctggtattg gccataattt acaagaacat tctgtagtat tagtaagagg aggaaggggtt 180
aaggatttac ccggtgtgag atatcgcat attcgaggaa ccctagatgc tgtcgcagta 240
aagaatcgtc aacaagggcg ttctagtgcg ttgtagattc ttatccaaga cttgtatcat 300
ttgatgatgc catgtgaatc gctagaaaca tgtgaagtgt atggctaacc caataacgaa 360
agtttcgtaa ggggactgga gcaggctacc atgagacaaa agatcctctt tctaaagaga 420
ttcgattcgg aactcttata tg 442

<210> 9606
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-F7

<400> 9606

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gcattgtatt tggaggacaa gtaccctcag cgccctcttt tgccccaaga ccttaaaaag 120
aaggccctga atatccagat agcaagcatt gtgtgttctg gtattcaacc tcttcacaat 180
ctcaccttgg tgagatttat cgagcaaaaa gttggaacag gggagagcat cccgtgggtc 240
aaacaacaga ttgatagagg tttcacagct gttgagaaca tgatcaaagg ctgtgctggg 300
aagtttgcta tgggagatga agtccaactg gcagatgtat tccttgacc ccagatTTTT 360
gctgcggtga ctcgttatca aatcgacatg tcgaactatc ccaccctcgc gaggctctac 420
gatcaatata tgacacaccc tgcatttgaa gctg 454

<210> 9607
<211> 451

<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-G1

<400> 9607

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aagcttggag gcattgacaa gcgtgtcatc gagagggtcg agaaggaagc cgctgaaatg 120
aacaagaggt ctttcaagta cgcttgggtg cttgacaagc tcaaggccga gcgtgagaga 180
ggtatcacca tcgatattgc tctctggaag ttcgagacca ccaagtacta ctgcaccgtc 240
attgatgccc ctggtcaccg tgacttcatc aagaacatga tcaccgttac ctcccaggct 300
gactgtgctg ttctcatcat tgactccacc actggtggat ttgaggctgg tatctccaag 360
gatggccaga cacgtgagca tgctctcctt gctttcactc ttggagtga gcagatgatc 420
tgctgctgca acaagatgga cgccaccact c 451

<210> 9608
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-G5

<400> 9608

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ggccggtatt ggacaatgtg gaagctgcct atgttcgggt gcaactgacgc cacacagggtg 180
atcaacgagg tggaggaggt caagaaggag taccctgacg cgtatgtccg catcatcgga 240
ttcgacaaca tgcgtcaggt gcagtgcgtc agcttcatcg ccttcaagcc accggggtgc 300
gaggagtccg gcaaggccta aacagctcac tcacgacagg ccatatataa agtgccattg 360
cagttttgtc aactctgaca ttgctttggg ttttccttct ccatttatct ttcttatttg 420
ttcctaagaa tatgtgtatg tccatgttca t 451

<210> 9609
<211> 340
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-G8

<400> 9609

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accgctacgc cggcggaacg accgggcttc ttatctgggc cgtcacctc gccggcctcc 120
tcgggggggg cgtcctctc gtctacaaca ccagcgctct cgccggctaa gagagcatct 180
acgtgtaaca cagggccggg tctctgcttg catgcacgtc tctgtaatct acatagctac 240
ctcctgtgaa tgtatgcaat caacgatgca aagtaattga tccgaacaga tggtttatgt 300
gtatgtacgt aacgctgtaa cgatatactt cctactttac 340

<210> 9610

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-H1

<400> 9610

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attttccgga gatattcatt ttcctgaaga ggcggataag atattagggtg gctgtttgat 120
accgccagaa agacaaaaaa aagattctaa ggaatcaaaa aaaaggaaaa attgggtcta 180
tggttcaacgg aaaaaaatc tcaagagcaa ggaaaagtat tttgtttccg ttcgccctac 240
agtggcatat gaaatggacg aaggaagaaa tttagcaaca cttttcccgc aggatctctt 300
gcaagaagaa aataatctcc aaattcgact tgtcaatttt atttctcatg aaaatagcaa 360
gttaactcaa agaatttatc acacaaatag tcaatttggtt agaacttg 408

<210> 9611

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-H8

<400> 9611

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gttggtttcg tcttccgtga gcacaatagc tccccggat actatgacgg tcgatactgg 120

acaatgtgga agctgcctat gttcgggtgc accgacgcca cacaggtgct caacgaggtg 180
gaggaggtca agaaggagta ccttgacgcc tatgtccgcg tcatcggctt cgacaacctg 240
cgccaggtgc agtgcgtcag cttcatcgcc ttcaggccac cgggttgcca ggagtctggc 300
aaggcctaaa ctacgagttg aaacaatggc ctatgtatga aggtcttttg tgaacgtcac 360
ttttgtccac gactctgctg gacgaccaga gcatatTTTT cattcc 406

<210> 9612
<211> 446
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-001-Q1-E1-H9

<400> 9612

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cagagtacga ttaacctctg gatttgaaat cactgcttat atacctggta ttggccataa 120
tttacaagaa cattctgtag tattagtaag aggaggaagg gttaaggatt taccgggtgt 180
gagatatcgc attattcgag gaaccctaga tgctgtcgca gtaaagaatc gtcaacaagg 240
gcgtttctaaa tatgggggtca aaaagccaaa aaaataagtg attttagccc ttataaaaag 300
aaaacggatt cttgaacctc tttcacgctc atgtcacgct gaggtactgc agaaaaaaga 360
actgcaaaat ccgatccaat ttttcgtaat cgattagtta acatggtggt taaccctgat 420
atgaaagacc gaaaaaaatc attggc 446

<210> 9613
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-A10

<400> 9613

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cgctctaca tcgaccacta tttccaagac gagatcgaga ccatcataga ctcggtgtgca 120
gatctcatcc atagtgatga tctgcttgat gcaacccttt ccttgaggct gatgcgagaa 180
gctggatatt atgtttcggc agatgatggt cttcagaagt tcagaaacga taatggtgaa 240

ttcaaccttg ggctcagcaa agacattaga gggttgctca gcttgcaaga catatcacac 300
ctcaacatgg gagaatcatc actctacaag gcaaacgaat tctcaagcaa gcatcttaga 360
ttcacaatta agtatttggg gccaaacctt gcaatatatg tgaggcgggc actagaccat 420
ccctatcatg tgagcctgat gcaatac 447

<210> 9614
<211> 431
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB30-002-Q1-E1-A11
<400> 9614

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atgggtttat ggatcatctg cgtttgcgt cgaaagtctc aagctgaaga agatcatgat 180
gcaaacatgg ctgataccaa gatacaactt ccagtagcgc ctgattaggg agagggaatc 240
catcaatagg ttaattgagc aggcaatatc agatgcggat caaagagggg tcaaagtgc 300
cagtcttggg cttttcaatc aggaaagaca actcaatgga agtgggtgaat tatttacaca 360
aaaatatcca aaattgagag ttcgacttgt tgacggaagt ggcttagcaa cagcagttgt 420
tctcaagagc a 431

<210> 9615
<211> 388
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB30-002-Q1-E1-A12
<400> 9615

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cgtgaactac catggcaaga gctccaaggc caacagggtc acagtcattg cagcggaaaa 180
cctcgacgag aagaggaaca cggacaagtg gaaggggtctt gcgtacgata tctccgacga 240
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cgacggcacc cacgaggccg tcctcagctc ctacgagtag gtcagccatg gactcaagaa 360
gtacgacttc aacaacacca tgggaagc 388

<210> 9616
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-A2

<400> 9616

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gcattggtga ccagcagtg ctcctatgctt gcgatgccgc ccagttgctt ggcagaagaa 180
tgtgaccggg ggtactctct tcctaacatg ccgctgctgt ttgcgatagc catggttggt 240
gctactgttg gagggctcct tgcgagacaa aggaaagggg aacttaaaaa gcttaatggt 300
cagctacgtc agataaatgc ttcactgaga agacaagcca agatcgaatc ttatgctcct 360
gctttgagct atgcaccggc tgctagtaag ataccagaat cagaagtcac tgttgatcct 420
cacagacagc gcttgcctcc atatctga 448

<210> 9617
<211> 446
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-A6

<400> 9617

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ccttacgtaa agttgccaga gtacgattaa cctctggatt tgaaatcact gcttatatac 120
ctggtatttg ccataattta caagaacatt ctgtagtatt agtaagagga ggaaggggta 180
aggatttacc cgggtgtgaga tatcgcatia ttcgaggaac cctagatgct gtcgcagtaa 240
agaatcgtca acaagggcgt tctaaatatg ggggtcaaaaa gccaaaaaaa taagtgaatt 300
tagcccttat aaaaagaaaa cggattcttg aacctctttc acgctcatgt cacgtcgatg 360
tactgcagaa aaaagaactg caaaatccga tccaattttt cgtaatcgat taattaacat 420

ggtgggtaac cgtattatga aagacg

446

<210> 9618
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-B5

<400> 9618

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aacattctgt agtattagta agaggaggaa ggggtaagga tttaccgggt gtgagatatac 180
gcattattcg aggaacccta gatgctgtcg cagtaaagaa tcgtcaacaa gggcggttcta 240
aatatgggggt caaaaagcca aaaaaataag tgattttagc ccttataaaa agaaaacgga 300
ttcttgaacc tctttcacgc tcatgtcacg tcgagggtact gcagaaaaaa gaactgcaaa 360
atccgatcca atttttcgta atcgattagt taacatgggtg gttaatcgta ttatgaaaga 420
cgcacaagag 430

<210> 9619
<211> 334
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-B8

<400> 9619

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aattgactta ctacacccca gagtatgaaa ctaaggatac tgatatcttg gcagcattcc 180
gagtaagtcc tcagcctggg gttccgcccg aataaacagg ggctgcagta gctgccgaat 240
cttctactgg tacatggaca actgtttgga ctgatggact taccagtcgt gggtgttaca 300
aaagactacg ctatcaaatac gagcctgttg ctgg 334

<210> 9620
<211> 441

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB30-002-Q1-E1-C10

 <400> 9620

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 aaggcaactt tgatcaaggc catggaggaa gcagatgtga aaaccaaagtg ggagaacagc 180
 tcatggggta agaagcttgt tgtccagaag agaagagcat cgctgaatga ctttgacagg 240
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 ctcaagaagg aggttgctgc ttagattatc ttagtggatg gcatgttgag tttttgttc 360
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 ggagaactac ttcataattt g 441

<210> 9621
 <211> 314
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-C2

<400> 9621

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 tatggcacgt gttggataca tagcaggcgt taccagaaaa tctgtgactg acgacaagcc 180
 atcatatggg gctatcgaaa cggaaatctc ggaggtattc ctactagctc ctcaacctga 240
 ggttccaccc gttgaagtaa gtgctgtact agctagcgaa tcttctactg gtacatggac 300
 atgctgctg gtct 314

<210> 9622
 <211> 451
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-D6

<400> 9622

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ttggaggact tcttaattgg gttaattggg taccagcaag ggaaagtgca agaggaactg 180
gagaagtagg agaaacaatc aaggtaatgg aaacaagaac ggcagaaaaa gaatctcctt 240
atgactacaa ccagaaacag tctgatgtgt accatggcat cggcgatggc aacgctggca 300
gcagcgtaga tggatgatgat gataagaagg cgtgccatga cattcgtgat agtggtttg 360
actatgggcc ccaagacatg gctgatgggt actacagcgg cagccattat ggcacgata 420
gggagttgcc accactgagt catagaattt c 451

<210> 9623
<211> 441
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB30-002-Q1-E1-E11
<400> 9623

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tgaccacaag gatctgcata tgattgagaa gaagatcagg gacctcgaca aggccaggga 180
tacgttgaag atgaggaacc tgaagaatga gctgactgct gccaggtgta agctcaaaca 240
gtcaagagaa gtgatcagca atggcaagaa ggctctccta gatggtgctc tgatccagct 300
ccacgcgtac aagaaactag aatcacttac tcggctcact atatgagtga gctgaccacg 360
cttttcgcca ttattatact cgatatcatg agaatggtcc gccggtgtaa aacttggtgc 420
tgccatgtct gcaaaataaa a 441

<210> 9624
<211> 438
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB30-002-Q1-E1-E12
<400> 9624

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 tatattgctg gaggagccac gcagaactct atcaggggtg cccaatggat gcttcaaact 180
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 ggcacatgtg ctgtctgtgt tgttggtggt gaaaggatcat tgattgcaaa cttatctgca 360
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 canaatacat ctacattg 438

<210> 9625
 <211> 423
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-002-Q1-E1-E5
 <400> 9625

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 cttagcagtc aataccacca catctgtaat tgttgacagg agttcagatg gggagttctt 180
 acggatagat tttaacttga gctttcctgc gctttcatgt gaatttgcac cagttgatgt 240
 cagtgatgtg ctgggaacac acagactaaa cataacgaaa actgttcgca agttttcaat 300
 tgatcggaat ttagtaccta ctggatctga gttccatgct ggaacgatac ccactgtcaa 360
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 caa 423

<210> 9626
 <211> 444
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB30-002-Q1-E1-E8
 <400> 9626

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aaggtctatg cataggaaaa agagctcttt agaagtgaag ttataacaag tggttgttca 180
atTTTTggtg aaatactttg gcgcaaagac aggagctttt atcttccgcc tatttgccac 240
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gcaccaatt tccttcatgg caatcacccg ctacgggcaa ccacaggcac tgatcatgca 360
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agattgtcat aagcttttag atga 444

<210> 9627
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-F11

<400> 9627

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cctcataagg ctgttgacaa gtgagcagca gtcactgcat tgtacgtcca atacgaagcc 180
gacgatcctg ccaaacaatga gcatcatcct caatcgagca ccagcgactg ctgaaccctc 240
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agaaatacta gatcatgcta aatgagccat caattgtagt gcttgctgog catgtggcac 360
gcagtttttg tacatatgtg attattcttc gcaagttgta agcctcgaga ttctagtacc 420
agaaatatgt gatt 434

<210> 9628
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-F9

<400> 9628

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caatgtggaa gctgcctatg ttcgggtgca cgcagccac gcaggtgatc aacgaggtgg 180
aggaggtcaa gaaggagtag cctgacgcgt atgtccgcat catcggattc gacaacatgc 240
gccaggtgca gtgcgtcagc ttcacgcct tcaagccatc gggctgcgag gagtccggca 300
aggcctaaac agctcactca ccacgggcca catataaagt gccattgcgg ttttgtcaac 360
tctgacattg ctttgggttg tccttttcca tttatcttcc ttgtatgttc ctaagataac 420
aatatgtgta tgtccatgt 439

<210> 9629
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-G11

<400> 9629

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tgtggagacc gtctacagag gagctcgtaa gggccgtagt ctggtgattg ctccaagga 180
ttactccacc aagtaccgtt actgatgtat ctgtgccagg ctattcatgt gcagtgtgtg 240
gcctgctctg ttctgtgaaa tgagctgtgt gacccttgat gtaatgtctg tcaactttga 300
aagtgtcgcg taactatgta tctgtatctt aaatacatgt cataaatctg taagcctttg 360
aatcaggacc tgcagtcgat tggattact gattagagtg ata 403

<210> 9630
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-G12

<400> 9630

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ttgacattgt tgacaccttc cgtcttcagg agcaacctgc ttttgacaag aagcagttta 180
tctctcacat gaagcgctac atcaagaacc tctctgcca gcttgaaggg gatgacctag 240

atgttttcaa gaagaatgtt gagtctgccaa caaagtatct tcttagcaag ctcaaggacc 300
 ttcagttctt tgttggcgag agcatgcatg atgatggcgg cgtggtgttc gctactaca 360
 aagagggagc tgctgatcca actttcctgt acgttgacaa tgggctgaaa gaggtcaagt 420
 gctaataccca ctgtatgcta 440

<210> 9631
 <211> 359
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-G9

<400> 9631

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 gtccaaggcc gaatccggcg cctccaatac ctatccgcag caggctggcg ccatccgcaa 180
 ggggtggccac atcgatcatca atgcccgtcc ctgcaagggtt gttgaagtca ccacctccat 240
 gactgggaag catgggtcacg caaagtgtca ctttgttgcc aatgagatct ttaatggaaa 300
 gaggcttgac gatatcggtc cttcaagcta caactgtgac gtcccccatg tagactgcc 359

<210> 9632
 <211> 424
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-H1

<400> 9632

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 atttacaaga acattctgta gtattagtaa gaggaggaac ggtaaggat ttaccgggtg 180
 tgagatagcg cattattcga ggaaccctag atgctgtcgc agtaaacaat cgtcaacaat 240
 ggcgttctaa atatggggtc aaaaagccaa aaaaataagt gatttttagcc cttataaaaa 300
 gaaaacggat tcttgaacct ctttcacgct catgtcacgt ccatgtactg cagaaaaatg 360
 aactgcaaaa tccgatccaa cttttcgcta tcgattagtt aacatgggtg ttaaactgat 420

tatg

424

<210> 9633
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-H11

<400> 9633

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aattatgttc tgctcgatct cgatacaatt gagatccgcc caaatggcaa ggaggaaatt 180
agttctagca aaattcatgt ctctgttgag agtggcagca caatatgctc aacttgcgag 240
aacttgacaa ataaagctgt cagttatctt agtgaggaac aaacacaaga tgagatcatg 300
gagattcttc atgggtgctg ttctcagaca ttctccttag aacagaagtg tcttgagatg 360
gtggactcct atgcaactct gctctttgcc aaggtaactg aaatcgagcc agacgagttc 420
tacaacggt a 431

<210> 9634
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-H12

<400> 9634

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gtccagatag gctctccac aaagagccgc attgccttga ttagttgtc actatccaat 120
gtaaagcggg gatacattcc tgcaggcaaa acaatcatgc cacctttctt aactgctata 180
cggatccact gttcgttttg gtccctcaca tcaaagtatc cactgccctc gagacaatag 240
cgtatctctt catcagtatg caagtgtctt tcaaagaagt tcttcagctt ggcctcatag 300
tttggaact tctctggaca tacgtcgcaa atgtccacat aagagtatcc cctggcctca 360
cggattttct tgagattctc gtctttctcc cagtcacag cattcaggtt ccagcttaca 420
acaccaatt ctgaaagttt g 441

<210> 9635
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB30-002-Q1-E1-H6

<400> 9635

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gctgcctatg ttcgggtgca ccgacgccac acaagtgatt aacgaggtgg aggaagtcaa 180
gaaggagtac cctgacgcgt atgtccgcat catccgattc cacaacatgc gccaaagtga 240
atgcgtcagc ttcatcgctt tcaagccacc gggctgccat gaatccggca aggcctaaac 300
agctcacatc acgacatgcc atatataaag tggcaatgca gttttgtc 348

<210> 9636
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-A1

<400> 9636

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gtgctcgccg tcgagcagct ggttgccctgt gctggtgagt gcaagcagct cgctggcaca 120
ggaggtgggc tgggccagta ggttgcccg ctgatgggct tctaggttaag actctggtcc 180
tttttgtttt ttcttttatt tatttcttgc tctgggtatt gaaatagaat aaatactatt 240
tcattttcaa aaactctgga aatattcaga ggcacatttg agaattattct caactgcccg 300
aaaatgcttc caagattatt tgagcacttt agaattatta tagcacttaa aatgcccaca 360
ttcaaatact tatgggttgt tcaaaaat 388

<210> 9637
<211> 425
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-001-Q1-E1-A11

<400> 9637

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aaagatgccc aatcagtgcg catgttcgtc gctgatgggtg gtgaattgct catggctcaa 180
agctacgcca agaacatggg attgtatgga gagcgtgttg gtgctttaag catcgcttgt 240
gggagtgcctg atatagctgt taaggttgaa agtcaactta agcttgtaat taggcctatg 300
tattcgaacc ctctcttcca tgggtgcttct atcgtggcta ccatacttaa cgacagtgc 360
atgttcgacg aatggactct ggagctgaag gccatggctg atangataat tagcatgagg 420
gagca 425

<210> 9638

<211> 459

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-A8

<400> 9638

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actgaaccta actgaacttc agactaaaga agtacaattt acttggttca gactaaagaa 180
gtacaattta cttggcttta catatgaaga agcagaaaaa gaaccagact aactgaacct 240
aactgaactt aaacacacaa aaacagtatg atctgccaca ctctccagca ccttacaact 300
gcatgaaaaa acacacaaaa acacctcaa atctattggc tgcttgaaca ataaggacac 360
gagaaaataa ctaaaaaatc ctagagttga ctatagagtt gaagctatta aactttgctt 420
gateccacaca gacaactacc ctaatctctt cagatatga 459

<210> 9639

<211> 429

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-001-Q1-E1-A9

<400> 9639

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agggtggccg ccgcgataga agttgatgag atgcagagtt gcggaggagt ccgcggcgag 180
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acacggttcg cagaggcgac agagatgaat catgtgcgat agtaaatac cgagattgaa 300
tggcaatcca aatttccttt gtcctttgtc catgagtttt ttctacgatg aacataacct 360
tgctaatac cgtgttcaaa tttggcactt ttccaggttc atttacanta ttttaaggat 420
tatgtgcat 429

<210> 9640

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-B10

<400> 9640

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agggtgtctca gcaactccaag tacttctgtg agttctgtgg gaagtttgct gtgaagagga 180
aagcagttgg aatttgggga tgcaaggact gtgggaagggt gaaggctggc ggtgcttaca 240
ccatgaacac tgccagtgcg gtcactgtca ggagcactat ccgtcgcttg agggagcaga 300
ctgaagcata agttgctact agtgttttgt cctagtgaat catctgggat tttgcagttt 360
agacgatact ttggattcag ttctgttggc tgtttagtca aggattatct ttgtacttgg 420
tgcgatgatg ttctgttatg 440

<210> 9641

<211> 330

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-001-Q1-E1-B11

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 ccctgtgccg tcgccttctc tcaagtgcc tttcctgggg tgggtcttct tgtagtcggg 180
 cgccttgtag tccggcgtgt cgcggagccc cagcttcgac aggacgaggc agtacgaatc 240
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 cccctttcga gagtgccttat cctttttgtg 330

<210> 9642
 <211> 435
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-001-Q1-E1-B12

<400> 9642

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 ttatagtttt tcatagttaa gatcgagttt gttcttcata cctatagtcc acgaaaaaag 180
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 tctagtcctt tagagtttcg agttctgttc acagggtgtc acgtcgccgc tgccatatat 360
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<210> 9643
 <211> 444
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-C10

<400> 9643

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cgatgagagc tgtgaagggg gctccgtcag ctcttgccgc taacaagaga aaaagagagg 180
acaccaagaa gccaaggtg gttaccaagg aggaggaggc ggcactcaga gcgcgggaag 240
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gagttgtcaa tgctccaag ctcaaggtgc gcgccagtc gcgctaaaac agtggaaatg 360
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ttgagcgtca gtgacacata catg 444

<210> 9644
<211> 157
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-C5

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gggcttcgcc aagcaccatg ggagaagagg agtagggaga ggggcagggc tgcaccaacg 120
agagatcaaa tcatgtgtta tgggcaagag atggtgg 157

<210> 9645
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-C6

<400> 9645
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gagctgccaa ggtgttgag cagctgagcg ggcagtcgcc agttttctcc aaggcgaggt 180
acactgtcag gtctttcggc attcgtcgta atgagaagat tgcttgctat gtgacgatca 240
ggggtgagaa ggcaatgcag cttctcgaga gtgggctgaa ggtgaaggag tacgagctct 300
tgaggaggaa cttcagtgac actggttgct ttgggtttgg tattcaggag cacattgatc 360
ttggcatgaa gtatgacca tcaaccggca tctatggat ggacttcttc gtggttctgg 420
gaccagctgg ataacgcgtc tcccg 445

<210> 9646
 <211> 373
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-001-Q1-E1-C9

 <400> 9646

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 gattccttcg ctaaggcaat tgctcaagta ttgtcacaaa agattttcat tggacccatt 180
 gcactaggta ttacacctag atcggatatg aactccttca tccagactcc ttcatttgat 240
 gcttccgaag cagctatgta ctccgcttca cacgttgtca caccctagct agttcaagca 300
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 caacaccccc cct 373

<210> 9647
 <211> 434
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-001-Q1-E1-D10

 <400> 9647

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 ccttgagctt gctcgtcctc acctacagcc agccccgcag cttgattcat ttgtgcagcc 180
 atagggtgac ctgcgacggc ggctgggttg tctcctgatc tcctcgtacg cctcctcggt 240
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 agggaggagg tgagatcatc aatctgcacg atgttggtgc tgtctatgtc cgtgcagggtg 360
 atgttggcgt ggatttcgtc tccaacagct gctttgatcc atcttttagta tgaggatggt 420
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<210> 9648

<211> 439
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-001-Q1-E1-D11
 <400> 9648

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gccatacggg cctagtataa taaaaacttt catatagagt gcattaaata ctatgagaag 300
tttgatactt gatagttgtt ttgagatata aatatggtaa tattagagtc gtgctagttg 360
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<210> 9649
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-001-Q1-E1-D12
 <400> 9649

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ttcatcatga tgacctgaag cagagaaatg aagacatcaa cgtaatgaat cgacctcttc 180
gaggagagca actaagaccg agaacactca ctagaatttc gtaaccagaa ccttcccctt 240
acgcatttta aatcttagga cgagatttct tgtagtagag gagaattctg acaccccgat 300
agttaagcta cagtaaacca ctgttaatga tgccagggtc tcaaaattaa aattttgcta 360
aaccttgctt gtttcaaatt agttcaaata caaattcaaa taacaaatca aattatagtt 420
tcataaaaca atgaattaca 440
  
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 <211> 448
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<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-D6

<400> 9650

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gcgctgccaa ggtgttgag cagctgagcg ggcagtcgcc agttttctcc aaggcgaggt  180
aactgtcag gtcttttggc attcgtcgta atgagaagat tgctgtctat gtgacgatca  240
ggggtgagaa ggcaatgcag cttctcgaga gtgggctgaa ggtgaaggag tacgagctcc  300
tgaggaggaa cttcagtgac actggttget ttgggtttgg tattcaggag cacattgatc  360
ttggcatgaa gtatgacca tcaaccggca tctacggcat ggacttcttt gttgttctgg  420
agcgagctgg ataccgtgtc tcccgccg                                     448
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<210> 9651

<211> 453

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-D8

<400> 9651

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tcgtgctagg gacgcaacaa taagagaagc ttctaatact gaggatatga cctacaggga  180
agcattccca aatcagtggc agtgaaagca ccctgagtag gtctttcttc ataattaaca  240
gttttgtttt gctgtgctgt tgcattgctt aagtgttga agtacgcggg gactgaagc  300
tgcttcgaac ccgtgcatgg aaaatttcag aaaggaaagt cgtagaccat ttgtattggc  360
agtcggattg agaatccaaa tcagaacaac gcgacagtaa ataagcactc gattttgtga  420
acatgccaa gagtttgtcc ttgttgcccg acg                                     453
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<210> 9652

<211> 173

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-E4

<400> 9652

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ttgctcgggtg agattttaca ttttttcata tcttagatca attgggggtcg tcatacctaa 120
ctcgagttgc agctctatac gatcgatgct tattgtacac gtgcatgcga cgt 173

<210> 9653

<211> 456

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-001-Q1-E1-E6

<400> 9653

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gcgcgcgaga tagtgccgca taccggatcg ccctaaaacg acggccttta tatggaccaa 180
actgtaaaac ctgccgtacc aaatattgtt gtcgagtaga aaatactgtt tgaaatatta 240
taaatatgcy caacgcgaat aacaaaaaca attacacctg aggattcatc cgacaacgctc 300
caaaccaatg gaggatgagg ctataatgct cgtgggacgt cctgnccgga gtgcctgaag 360
actacgttgg gccgaatagt atacgaaacg accgatctga acacgagggt tcttacgcat 420
aggtcggctc gcccgattga cacagatgga aaacca 456

<210> 9654

<211> 367

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-E7

<400> 9654

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gcggtcgtg gagacgatag ttggcgtttt tgtggagggg tctccaaggt cttgtttgta 180
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ttctggctgg gtctgtctgt gtgtgggtgt aactatgtat cctgattgtt ttattaaatg 300
acagatggta ccttctcaaa agaagaatgg ttgccaacat tttccctgcc tgattagtca 360
ctccctg 367

<210> 9655
<211> 427
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-001-Q1-E1-F10
<400> 9655

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gagagagggg aagagtacca gaagggtggc tgcggcgggt ttggcaaagg caacttctcc 180
gagctgttca agtccattga ggattatgag aaatcccttg aagccaagca atctgctgca 240
gttcaggcat cataggatag aagctggaat tggagccgga gaagctgac cagtgccttt 300
tatcatggtc tcatggagca aaagaaaca tgttcattgt aatatgagac gcacaattat 360
atccgatgtt ataattggtg aagctgaaga cagatgtatc ctatgtatgt tgggtgtaat 420
agatggt 427

<210> 9656
<211> 348
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-001-Q1-E1-F6
<400> 9656

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gatgctttga aacaggtggg catcgagtgc ttcaagagca gcggagggtt ctactgctgg 180
gcagacatga gcaagttcat ccggtcttac agcgagaaag gggaacgcag tctttgggac 240
aggctgttgg aggaggcgaa tgtcaatgtc accccaggtt catcttgcca ttgcattgag 300
cctggttggg ttaggtgctg tttcacaacg ttgaggagc aggatatt 348

<210> 9657
 <211> 442
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-F7

<400> 9657

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 atatattgct ggaggagcca cgcagaactc tatcagggtt gcccaatgga tgcttcaaac 180
 tcctggtgca acaagttaca tgggttgcac tggaaaggac aagtatggtg aggagatgaa 240
 gagcgccgct aaagctgcag gagttactgc tcattactat gaggatgagg ctgctcctac 300
 aggcacatgt gctgtctgtg ttgttggtgg cgaaaggcca ttgattgcaa acttatctgc 360
 tgcgaactgc tacaaatctg agcatctaaa gaagccagag aactgggcac tacttgagaa 420
 agcgaaatac atctacattg ct 442

<210> 9658
 <211> 403
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-G10

<400> 9658

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 cctggttgag tagtgcgccg gaccggtggg tgccccatac tcggcatgcg tcctggttgg 180
 gacctcaggt cttagatggt aggtttggct gcaaggatg tctggtatta ggtccagact 240
 atcagcatcc cttcaacaac tggatatgaa tagcaacaga tgttgcttag acggtggatt 300
 tagtcttact gttgtattac tttgtaaggc cttgtgtgaa ttattaataa agtggctgca 360
 tgcacgtct aaatataaag gccaggggtc tttctccttt tct 403

<210> 9659
 <211> 279

<212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-001-Q1-E1-G11

<400> 9659

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 ttgtactttt tggctctgtag catcacgaga cttgtgtgtg tcgtgaacaa tgcaatgatg 180
 catgttttgg ctcatgttg atttcagctt aatgcttatt atttggacta aaaaaaaaaa 240
 aaaacaaacc aacagaaaaa aaantcccat caaggggac 279

<210> 9660
 <211> 424
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-G12

<400> 9660

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 atcgtcaatt ccggacccat catcgctcg cagctgttgc tagtggatga ggtgatcagg 120
 gcagggcgaa acatgaggaa accaacctaa acctagcgct cggcccttcc aggccgagaa 180
 gactttttgt ttggtgttt ttctctgtgg ggtgccgagt acgtagcgag tagtgatgtg 240
 gtgggggtgga atgcttgagt gcaagagatt gtacttgtaa caaccctcgt gacagtttgt 300
 cgatgtgttt ctacgctggg gtttgtatgc agaataatatt cgtgttggat caagttgagc 360
 agctatgtat tttttgtgtg ctgggtggtga ttggattctt gtttgtgttg agcaaagcct 420
 gcct 424

<210> 9661
 <211> 463
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-001-Q1-E1-G6

<400> 9661

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 ggacaatggt gaatatattg ctggaggagc caccgagaac tctatcaggg ttgcccattg 180
 gatgcttcaa actcctgggtg caacaagtta catgggttgc attggaaagg acaagtatgg 240
 tgaggagatg aagagcgccg ctaaagctgc aggagttact gctcattact atgaggatga 300
 ggctgctcct acaggcacat gtgctgtctg tgttggttgg ggcgaaaggc cattgattgc 360
 aaacttatct gctgcgaact gctacaaatc tgagcatcta aagagggcag agaactgggc 420
 actagttgag aaagcganat acatctacat tggctggctt ttt 463

<210> 9662
 <211> 444
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-G9

<400> 9662

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 acagcaagga cttcttctct gcaacctcag gccttggtgca tctggaatcc ttgctgggtgc 180
 ggctgggcaa ggacagccaa ggctgcctgg acgaaatcac cctgccttgg gagaacctgc 240
 ggagcctcac actccacggg cttcaagaca agctgccacc atcaaagaac ctcaggaagc 300
 tcatgaagct ggatctggag atggacgcct taaaggaaga cgacatcaag ttcctagcca 360
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 attttcacgc cgagatgtac gggg 444

<210> 9663
 <211> 401
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-H6

<400> 9663

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 gggtttaaga ttcattagct ttctcattct actctttcac aaaggaatgc gaagagaact 180
 caatggatct tatcctattc attgaataga tttctttttt attagagtat cggcaagaaa 240
 tcttggttat tcaactctatt ttttaagtttt atttaagtaa accatgcaca atgcatagga 300
 ctaccccccc attttcaa at tttaaatttg aaatacttta attaattttt agtcctttta 360
 attgacatag atacaaatac tctactagga tgatgcacaa g 401

<210> 9664
 <211> 416
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-H7

<400> 9664

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 caaactcttc tctacctga cctcggccac gcgcaactcc tctctccgac gctcctcgat 180
 ctccgctgcc tcttgcatct ccagctctcg ctcgatgata tcatgaggaa gtaggtgctc 240
 catggccacc ggtgcctttt tggacgtggg ttgcatgctg gatttcgagg tggcctggaa 300
 tatcttggcg tgtgcatcct cgatcttggc gggatgccct cgacactggc caaggcaaca 360
 tcggcgccac ggacgacagc tcgagcgctg tcggcgtttg catccatcgt cgcagc 416

<210> 9665
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-H9

<400> 9665

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 acatcaacat ggtttgcat acattgagga acacaattcc gaaagccgtt gtgcattgcc 120
 aagtgaagga ggcaaaaaga aacttgctca accgtttcta tgcgcatgta ggaagcaag 180
 agaagaaaca gctgagcgcg atgctggacg aggatcccg cgttgatggag aagagggatt 240

ccctcgtgaa gaagctggag ctgtacaagt ccgcgaggaa cgagatcgac tcggttgcat 300
 ggaaatgata tgatctgata cgatagagcg tttgctggctg gaacagatag aacatgtgta 360
 gtagagatgc tccattcgtt ttgcatatgc tttgtacacg ggctttgctg ccgagtgttg 420
 ttttgtggct aacaccgaga catgg 445

<210> 9666
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-A10

<400> 9666

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 gtggtggtgg tggttttggc ggaggtggac ttggcggagg tggactcggg ggtggtggtg 180
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 cttgatgtcg atgatgattc cgtgtatgcg gccgttgtgc catgcctttc atgttttaac 300
 ttttatgatg tttcatgtct tgcactactt ttatgttcgt gactttcgct agtgatgata 360
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<210> 9667
 <211> 459
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-002-Q1-E1-A2

<400> 9667

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 ggaaaatccc cattggctcg ggctgttaac ggggttatcg aaacccgacc cgatagctta 180
 acggcgttcc gttacggtgg atgccgcgtg tcagtcaccc ttgacgaaag cacttctgtg 240

acgcgcgatt tatcgtcatg gaagtggaca cttccgtgat gataattttg gtaatgtcat 300
 ggaacacttc tacgacagca caggtatgac tatcttgatt ctgtcataaa tttgtcatgg 360
 aggtacatgc atgacaaaaa aatgcgacct actgtgacaa acacgtatca tcacggaagt 420
 gtantttttt tgtagtgcac ggggtggcccc gatgtcaac 459

<210> 9668

<211> 444

<212> DNA

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<223> Clone ID: LIB31-002-Q1-E1-A8

<400> 9668

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 gcctaggaga gttcacttac gacctcgaga agagcaacgc ccagaccttc cagctagaca 180
 gaaccaccgc cgacgcacat gtggtcaaca ttgtccggct cgacttctcc tcgaaccatg 240
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 ttcggcaccg cggcacgtg aggcctgatc tagttagtac ctgtgtgcct gggaccatac 360
 ggtcttccct ctttagcctt gattgaagac ttgaagcccc tgcgagacgg taggttcaag 420
 ttgattctaa tctgtagcat aatg 444

<210> 9669

<211> 439

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-002-Q1-E1-A9

<400> 9669

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 agtttttcat agtttagatc gagtttggtc ttcataccta tagtccacga aaaaagccaa 180
 aaaaattagg gttagttcat cctatccgaa ccaatctgag cctttgcata atcttttgtg 240
 tatttgctt gttcaatttg cggttgcac gtcgtgtcca gttgctgggc ttagcgtcta 300

gtcctttaga gtttcgagtt ctgttcacag gttgtcacgt cgccgctgcc atatatcacc 360
 actgcatcat catcatcgct gctgccatat accaccacca caccaacttc atcgtcgctg 420
 ccatatnaca acaacacat 439

<210> 9670
 <211> 418
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-002-Q1-E1-B12
 <400> 9670

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 aaatccagcc cccccccctt ttagaaaaaa aacaaaaacc ctagccccctg aacagctgac 180
 gcgtggatgc ctattggcac tagtagaaaa gggggcaaag gtccaggccg ggtcagccca 240
 ttagtcccgg ttcagtccag aaccgggacc aatggggcat tggacccggg tcatgagccc 300
 agggggggcgg ccggggccacg tggggccattg gtcccggttc gtctggacct tttggtcccg 360
 gttggtggga cgaaccagga ccaatgggtc tcgctcctgg cccaccacca ttggtccc 418

<210> 9671
 <211> 438
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-002-Q1-E1-B3
 <400> 9671

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 ccaaggaata atagttcaaa cagcaacgtg acatcagcag gttcctccag cttaacctct 180
 tcagagaatg gacctgaata ttcaagcccc gtagcacaat gatgagtgga tccctagctt 240
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 ttgcggtttt tgtacgctcg cttgcccttc ccaacctgat gtatgaaaat tatgtggaag 360
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gaacaacttc cgtttcac

438

<210> 9672
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-B8

<400> 9672

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tttccaagtc actgtacgag gctcatggga ttgaaaacct ggtgctacca actagagatt 180
acctttatgc gccatcattt gacaaccttt gcaaggctgc tgacttcac cagagaaatg 240
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ttgttctttg ctacttggtg caatacaaac aaatgacacc tgctggagct tttgaacatg 360
ttcggtcatg caggccaagg gtgttattgg cttccgcaca atggaaagct gtccaggaat 420
tctaccagct tagagtgaag aaaa 444

<210> 9673
<211> 408
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-002-Q1-E1-C11

<400> 9673

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accaagaccc agtctaccat ctgctactga actcccatag caagaagacc tgaaaactca 180
ttgaagggat atgttcttgg tacacaataa tgtcccctct gttcataaag gtgccacaat 240
aaagggtata ccagagtagc aattagagaa gtttttctt tgtggaatgg aatgatttct 300
taacgaagtt gaagctcctt gttatggtgt caaagggtgt tttctaattg tatatcaaat 360
ttaattgctt ggcagatgat agacaacaga tttttctttt ttacgaat 408

<210> 9674
 <211> 419
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-C12

<400> 9674

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 agctttctct caattggtgc taccccaact ctatctcgta tatcatcatt ccggactcga 180
 tccttctctg tgtggccact gtaaaacaaa agatactaca gtgtaaaaat actttgagaa 240
 ttacactata aaatcttttg ataatcacac tgtaaaactt tgagagaact cactaaggaa 300
 ttagagtgc aaatcttttg tgaattacca gtgagatata gtgggggaaac tatccgtgta 360
 gtaaagaaaa attaccagct cattacggat atctctgtgg tatgatgagt tctctccat 419

<210> 9675
 <211> 363
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-C5

<400> 9675

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 acacgtcaaa taacaaggag ctgatccacc atcttttcaa acacgtcgag gctaaccaca 180
 gcgatcccct ctggcgccac actctcgga gagaaagact caataattgt gtgatatatg 240
 gaatgccaac gctgatggcc acttggttgt atttgactg ggagggttg aaaatatgtt 300
 cgctttctta cttggaattg ggcactagtt ttctagctca atctcttgag tctagatgat 360
 gct 363

<210> 9676
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-002-Q1-E1-C7

<400> 9676

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atttgagtaa aacttaaatg tctagatgca tataagcttg tgagttaatt aatgctaact 180
tgatggtcca aactaaattc tgcaaatatg accatgacag aaagataaat ggaggtttag 240
aggcagagtg gatgcctgca ccaactttat aggttgaact acgttttgct agatgactca 300
natttcagaa cacgagcatt aatttttggg aatgcagtta acaacagaat caagtcaaga 360
tgaaaaatgg agaactattc aatattgagt ttaattccct tcttgcagag caacagagat 420
gagtgaagag attattaaat attga 445

<210> 9677

<211> 224

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-D10

<400> 9677

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ggagcttctt gatgccataa cccacaggca taagcttaga tgcaccccag gtgagaccct 120
ccatttgaac actgoggaca gcctcctcca acttcttcat gtcagtctca tcgtcccatg 180
gcttgatgtc catgaggacg gaggatttgc cactttcttt ctte 224

<210> 9678

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-D11

<400> 9678

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atttccttta taatagtagg tgatgttggc ccagccgacg aaccctagct actatacatg 120
gggagttggg gagtagtcgc atagaagaaa acccgcatgc agcaacctgg ggagctggaa 180

cagtacaaga agttatacct caggtgggcg agatgtcact taggcgggtg ggcgggatct 240
 tcccacagaa caagggcgca gaggaccttt gtccgcgcca gcgccggctc cgagtggacg 300
 gtgcacaacg gcttctcca tcgtcgatgg taacaacgtc aacgctgcac ctctcacct 360
 cccgcagcgg acggaattcg gccggatctg tgaccaccga tgaggagaga gatagagtgg 420
 aactgtcat cttgttttg 439

<210> 9679
 <211> 461
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-D8

<400> 9679

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 attggccgta ccaaagtgtg cggttgcaac atgtcgtgaa atgaacatat gtatatatat 180
 aaagcaatta aagcaataat aagcaagagc tatgtattgt ttattcaaaa aggtactgca 240
 atggaagcag aacgatacaa atagtgcggg aagcaaggga tgagactatc taacatgtcc 300
 ccctctaggg gtaagctgcg ggatggatatg taaaacagggt ataatgctca taacagagac 360
 caccgagca cttgacgtgg ccttccgctt ccctggctgt tgtatcgtga gttcggcgat 420
 tcaagtgccg gacaggactg ttcgaagacg gagtcctgaa a 461

<210> 9680
 <211> 423
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-D9

<400> 9680

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 tgattcaacc cattatgatt aaacatgttt gcaatgacga ttagagatta tagtttctca 120
 tgccatgcat aagtagctag gagtgaataa tgatttatct tagatatcaa catagcgta 180
 aaatgattgt gatctagtat gatgatatgg catcctctc tgaatgttcg agtggcttga 240

cttggcacat gttcacgcat atagttgaat caaaaccaac atagcctcta tgatatttat 300
 gttcatgggtg ttcatatcct actcatgcta gtgtccaatg ttacttatgc ataatgcatg 360
 gttatgatca ttgttgctct ctagttggcc gcttctcaat cttaattgct aaccttcgcc 420
 tgt 423

<210> 9681
 <211> 334
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-002-Q1-E1-E1

<400> 9681

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 gcaccgagtg gttccgtacg tcagggtcccg agtgctttag ccgttacata cgagcagctg 120
 agattcccaa caacttcagg ttggccacgg ggatcagcaa attcactagc gagtccaagc 180
 ctgagatatg gctagaaggt taccgaatag cagtctagat cgacggcggc aacgacaatg 240
 tggccatgaa gcatgtcneg ctgatgctag agggatccgc tcgagcttgg ctactcggc 300
 tcccgacagg cagcatattt tggtgggatg acct 334

<210> 9682
 <211> 442
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-002-Q1-E1-E10

<400> 9682

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 acgggacacc tttgcctcta tcaagtggta tcagatttcc aggttgctcg gtgagatttt 120
 acagtttttc gtagttttaga tcgagtctgt tcttcatacc tacagtccac gaaaaagcca 180
 cacaaaaaaa ttaggggttag ttcatcatat ccgaaccaat ctgagccttt gcataatctt 240
 tttaggggtt tgctttgttg aatttgcggt tgcacgctcg gtctagttgc tggctttaga 300
 gtctagtctt ttagagtttc gagttctggt cataagttgt cacgcccgcg ccgcaccatc 360

atcatcgccc ctgccatcta ccaccaccgc ttatccgcc a cgcctccgaa tccgtatcca 420
tnnatacaca ccgattcata tc 442

<210> 9683
<211> 198
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-E11

<400> 9683

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ctgcttcagg tgccaccact gcaagggcac cctcaagctc gcgaattaca actccttcga 120
aggagtgtccc aacggaaggc cacactttga acagctctaa aaggagccgg agactgtaca 180
aaagctttta aagcgcac 198

<210> 9684
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-E4

<400> 9684

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gccagctact gcgacgggga tcgtgacggc atcgccgatg ggcgacatca ccggcgatga 120
caacagatgc ggcttcttca tctcatcatc gacgcatgga tattcttgta ttgatttcca 180
tgcattcatt gtaattgata tctcagagc tagttcaatg aaacagtata atccatccat 240
gcatgccatg gcgaccaaga tggaggcatg cgcattgcta gcgtttccat catcaacaca 300
catcggcgct cacacgcgtg gcaatacaca gccgcgggtc ttgctgatgt gcagaataca 360
catgcatgcg tgcgtacctg acatgcatgc ctaacatatt gttttatttt acatgatacc 420
taacatgttg ttggttgatga c 441

<210> 9685
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-E7

<400> 9685

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atacgaaact ctttacatca atgattagtg cctgtattaa cgctggagat ccgaaacaag 180
cagagaaatt ggtaaagaaa atggatgagc tttccatgaa acccagcagg gaaatataca 240
tggatgtgat gcgggcatat gctgagcgta acttagtaga tggagctcaa tcggtgaaaa 300
caaaaatgtc atttgctgga atcgagcccc cgttggagtg cttcacattg cttatagaag 360
caaatggacg ggctggcaac cctgattatg catatgaagc gtttgaacag atgaagaaga 420
atgggcatga accagatgac cg 442

<210> 9686

<211> 453

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-E8

<400> 9686

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tgaacgcgta taggtcgaga gagatagtcc tacataagca tgactgataa ctatatgata 120
tgaatatctg gattaaaggg gattcaacta tttaaactgg agatcacgac atcgataata 180
tcataacgca catctggtgt atcaaacagt gcataatccat ttgaatttgg gcacatgtgc 240
taatgttata tagtttatca atattggtga tccatagatt cttcaattac atacaatgca 300
tggtttatat gcagttaatg tctacactgg attacactat atgttgcattg tgtgaaacac 360
attagacatg tctgagaagt aaaaaacccg catgatacac acattaattg gcgacactta 420
tcgaggaatg catacattgg atttcaacat aaa 453

<210> 9687

<211> 444

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-F1

<400> 9687

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aaaaatgtat aattagttcc atatagtgcg caatggattt tgaagcattt aagctgtttg 120
gcaagtctgg tggcatacac tcagtgcagt gtatgctttg aagaaagata taggcacctg 180
gtggatggga agtgcaaatg agatatgact tggcaactca acaagacagt tttggggagg 240
attataacat tacagagaga tgctgagtta gtgcactcat agtgggaagtg tttgattatg 300
acattagcga catggtagtt gctgagttag tgttgtaaaa ttgtgaagtg tcaagagggtg 360
tggggaagtc atttcttcaa gcagacaagg acaaaattca agaggctgat gaaacagcac 420
atgatgatca catacaggaa gcac 444

<210> 9688

<211> 435

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-002-Q1-E1-F10

<400> 9688

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ttgtatggcg tccagatagg ctctcccaca aagagccgca ttgccttgat gtagttgtca 120
ctatccaatg taaagcgggtg atacattcct gcaggcaaaa caatcatgcc acctttctta 180
actgctatac ggatccactg ttcgttttgg tccctcacat caaagtatcc actgccctcg 240
agacaatagc gtatctcttc atcagtatgc aagtgccttt caaagaagtt cttcagcttg 300
gcctcatagt ttggcaactt ctctggacat acgtcgcaaa tgtccacata agagtatccc 360
ctggcctcac ggattttctt gagattctcg tctttctcnc agtcattcagc attcagggtt 420
cagettacaa cacca 435

<210> 9689

<211> 442

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-002-Q1-E1-F12

<400> 9689

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caaagctgct catagcacca catcgctcaa tacaaagagg tttgatgatg atacagagaa 120
tcttgctcat gagcgtgtgc cgtcagacct gaagaagagc attatgcagg ctagaacgga 180
caagaagctc acacaggcac agcttgacac gctgatcaat gagaagccac aagtcacca 240
ggagtacgag tcaggcaagg ctatcccaaa ccaacagatc atcggcatgc tggaaagggc 300
tcttggcaca aagctgagag gcaagaagtg aagccgctg catctgacag gagtcgaggc 360
tttcaagaga gcttggctgg gcaangttta cgctaaataa agcttgtcta ctaaactcatg 420
cgacttaaga naaccctgga gt 442

<210> 9690

<211> 457

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-F6

<400> 9690

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caattttgat tatacagttt ttatacttcc gagagaaaaa acgcaattgt gattatactt 120
ctatactttc caatagaatg acgcaatttt gatatttccc cataaaaagg ttaaattttg 180
accaagaatt ctgatcatga ttctacttc tttttgctcc tctttttttt ttttttgagg 240
tgctgttgta agaggatcta tttgtgctat ataaaggaaa aaaaaggag catgaggacg 300
aactcaccat catgtcgagg gaggatttgc cgaggccgtt ctggcagccg tttgcctggg 360
aagagagctg atcgtctcct cttcaaactg atatataggt gctgggggtgc cgccagcaat 420
ggaaactcgg agactgaatc cgaaagaggg cctgttt 457

<210> 9691

<211> 457

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-F8

<400> 9691

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gacacgtgca tgccttgtag ggcgcgggtcc acatgcttgc aggcatagga acaaactctt 120
tgttacctag ctccgtcttt ggcttggcac ttgaatctgc tggctaata caacctcagcca 180
ggcgcttatg tttagctagc tagcatttct tctttgaaat ggggttctaa aagatgggta 240
ggctctggct aggggcctat ggttacgtgt ccttttttgc gggtcacatc ggccggaagc 300
atgggtatgtg tagctagcct gcttctgctt gtaacacatt tcagataatt gtgctgagc 360
tgtacagaat aaagcacgac aaatatatat acatatgtgc atacaagtgg gtgatggata 420
cgtgtcgatc catgcgtatc ggtcctaata agacgcg 457

<210> 9692

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-F9

<400> 9692

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tgattcaaac ggggaatatt ttctataggc ctagagaaaa acaggctcaa gctgatcaga 120
aaagggccaa atttttccag ccagagggag atcatcttac cctacttgct gtatatgagg 180
cttggaagc aaagaacttt tcagggccct ggtgctttga gaactttgtt cagtcaagat 240
cgctaaggag agcacaagat gtcagaaagc agcttctaac tatcatggat agatataagt 300
tggtatgtgt cgctgctggg aagaacttca tgaaaataag gaaagcaatc actgccggct 360
tctttttcca tgctgccagg aaagatccca ggaaggctac agaacttgg tggagaaaca 420
gcagtgtaca ttcaccc 437

<210> 9693

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-G10

<400> 9693

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agccatttga attggtgatg gataaatttg gagtgaaaac aaggctttca gagcagacaa 120
 tgctacctat tgaagcagat atcttgctgg ttacagatag ctcttcaa at gaggattcag 180
 aggcagatga ccagtcctat tatccccctg aggtgtatgc tcaaacttgg cagggttata 240
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 ttgaatacca tctccttagt agacacatca tatatgcgat tgccctcttc tcacttcctt 360
 agtatataaa tcatatattt gaatcatatc atgtagcgac cagacctcaa acagtctgat 420
 ctctgtgctc cggtgtcat 439

<210> 9694
 <211> 300
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-002-Q1-E1-G11
 <400> 9694

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 aaaaaaaaaa aaaaaaaaaa aaaaaagaaa aaaaaaaaaa aaacaaaaa aaaaaaaaaa 180
 aaaaaaatta aaaaaaata aaaaaaaaaa aaaaaaaaag gggccgcca aaaggttcaa 240
 accttactta ccggtgcatg caacttcaaa cccctccaaa agggcccca aaatccaatt 300

<210> 9695
 <211> 436
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-002-Q1-E1-G5
 <400> 9695

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 gtgctatttg atgtacttct ttgccagatt tttgaagaat tgccagtgc ttgtgtaacg 180
 gggctgagct ttatcttggt atcctctatc ctattctgga aaaaaagtat aacaatcaga 240
 agaaaagaac aacatgaaca tctgataaca aaaagtactg agagaaatac agaattgtgtg 300

atctcaaagc accttaatgt aagtaaaacg atctgctgta actttcttct tcaacgagtc 360
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actatcttga ctcttg 436

<210> 9696
<211> 456
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-G6

<400> 9696

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gttgaatcaa aaccaacata gcctctatga tatttatggt catggtgttc atatcctact 180
tatgctagta cccaatgtta gttatgcata atgcatgttc atgaccattt tccctctcta 240
gctggccgct tctcagtcta attgctagcc ttggcttgta caaagtggga tttctgcttg 300
tgcacaaaaa ccctgaaacc caagttattc cagatgagtc caccatacct acctatatgc 360
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tatecttttt gtgcgcctag attgttcata gagcga 456

<210> 9697
<211> 445
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-002-Q1-E1-G8

<400> 9697

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cagagatagc ggggctgttt tgcttgccgt tcaaaatcgt ggcagttgat ctgtttgctc 180
tacgctgatg ggagtatttg gcaatgttaa aagtaactgt cgttctgtac tgtttaatta 240
gcagtacagc ggtacttcct cacagaaaaa aggacgtgca taccaccagc aatgttcaac 300

tcctttggac cgtcttttagc aaaaccaatt acttttcagat tttcacagtg taaaacgcac 360
aaacgcaaga ggggaggatt gatttcattc tgcaagactg caaccacact gnaagggtgca 420
caggatctgc tccttccaca ccagg 445

<210> 9698
<211> 379
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-002-Q1-E1-G9
<400> 9698

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gatcggcgaa agagatggca ttttctctg accacactca cccttgacat tctcccattg 180
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caaaggctgt agcttccaga gtgctaatgc gaaagcctga gacttgaaag tgttattgct 300
tcccttgatga taccctaata ataaatgcat ttggcgactt aagcacttat gcgccgctga 360
ggtgtgatgc tttgcttca 379

<210> 9699
<211> 419
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-002-Q1-E1-H10
<400> 9699

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ttttattcag agatagcgcg gctgttttgc ctgcggttca aaatcgtggc agttgatctg 180
tttgctctac gctgatggga gtatttggca atgttaaaag taactgtcgt tctgtactgt 240
ttaattagca gtacagcggg acttcctcac agaaaaaagg acgtgcatac caccagcaat 300
gttcaactcc tttggaccgt ctttagcaaa accaattact ttcagatttt cacagtgtaa 360
aacgcacaaa cgcaagaggg gaggattgat ttcattctgc aagactgcaa ccacactga 419

<210> 9700
 <211> 422
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-002-Q1-E1-H12

<400> 9700

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catcattggg gttgagcaga tacgtcatat ctgtgtcgct gaccgcgtact acatgcacga  180
gagcttcttg ggagtctgcg cagagcaacg tgaatacgtg agggattaca tcgtcagttt  240
catgctcgcc aataaggaca aggaggcgat tctcgtgcct tatcatccca tgtaagtcac  300
ccacgtgct atccttcctt cgatttcaat aattcatttg cacggcggag gctaattaat  360
ttgaggtgta cttattttgc gcagcggcgg gtgcgcgcgt ctcacatcc tctanccccg  420
at                                                                    422
  
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<210> 9701
 <211> 437
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-002-Q1-E1-H6

<400> 9701

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cattggagtg cttctgttct gcggttctgg ctgtgcatga tctccagtgg cttgatcttc  120
gtttctctca tgctctgctg gctgctgctt cttggtcgta gtgagatatg catgtaatct  180
ttcggttttt gtcaagtttt tgcctttgta atttagcatc attgtatcct aatcggttga  240
tggttcatt aatttgaagt cgggcctttc gtgccttttt ttctaaataa agggaggagc  300
catgcagaaa ccaccctcat attttagtta acaaccagca gtacatgtag aaaataatgt  360
tttattagga atattaaaat ggtttaaaca tatacccata tagtttaaac cctaactcca  420
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<210> 9702
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-H7

<400> 9702

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 gcctatattga ttagaatttg ctaaaatact ctatgtgctt cacttatatc ttttgagctt 180
 gatagttttt gctctagtgc ttcacttata tcttttagag cacgggtggg tcttaatttt 240
 gaagaaattg ctagtctctt atgcttcact tatattattt tgagagtctt ttagaacaga 300
 atgggtatttt ctatgatcat aaagttggc ctagaatgac gagtatccaa gttgggtata 360
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<210> 9703
 <211> 182
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-A1

<400> 9703

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 atggctcagg tttgtgcaga atagatagat catacagtc agtatgagaa ataatgcag 120
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 at 182

<210> 9704
 <211> 433
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-B8

<400> 9704

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tcacgatgcc cgcccacttg atgtacgacg ggcaggacga caacctgttt gagcacttca 120
gcgcggtggc tcaacggctg ggcgtctaca ccgccataga ctacgcggac atcctcgact 180
ttctggtgca gaggtggaac gtcgccaacc tctctgggct gtctggggaa gggaggcggg 240
ctcaggatctt cctctgctca ctgggaccaa ggttcaggaa gctggaggag cgagctcagg 300
gcagggcgaa gcagttaccg gttgttcctt tcagctggat ccatggtcgg caagtgaac 360
tttgagtgaac attgcaaaac aattataaga cgatttggtc ttcttatttt caaaatatga 420
agcaactggt gac 433

<210> 9705
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-D7

<400> 9705

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aggcgctct gccccgatc catctgctgc tgtcacaaca aaaaccacac cgagagccag 120
cgcaatgagc aagaagtcga gggctaggaa aaggacatga gctgtgcttc ttgccagtgc 180
atggatggaa taccagtagc tcccttggtc tcggtgcata ggacatgcgc gtagttctag 240
ggtgaatttg actaactaaa aatgtgatat atctcatcaa aagcagatca ttggatacat 300
atatgaatgt agtttctaaa tattttttgt taaatataat acatattagc tagttaaat 359

<210> 9706
<211> 385
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-E8

<400> 9706

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atcgcccgga tgtgatggca aaatatactt gccgtattga aggtgataaa actctgtatc 120
cgggtgtgtt gtctaacggc aatcttatcg aacacggtga tcttgagggt ggaaagcatt 180
acgcacgatg ggaggatcca ttcaagaaat catgctacct gtttgcgcca gttgccggtc 240

agttggactg cccgggacgac tcaattgtta catgttcttg cgcgaaagt acacttccaa 300
 tttgggctcc tgctcaagat ttgccaaata catcccatgc tatgtagtct cttaaagaac 360
 cctacaaatg ggatgaggag gtttt 385

<210> 9707
 <211> 337
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-A4

<400> 9707

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 ctctcctca tagtgattgc gccttcatgc gtccgtgggtt ttctcccgca agggtttcca 180
 cataaaaaatc tgtgtgcttc cgtgtcacgt ttatctcgtt attctaagat gggccgtaca 240
 atattctgtc gtccatgtgg gccgggtcct tgtggccaat tcgtagccga tctggagacc 300
 tcgtcgggca gcgcgagcgc ctgggcgtac cgtaata 337

<210> 9708
 <211> 427
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-A6

<400> 9708

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 gcttggtgaa gcagttccgt ggtgcggttc cgcataatcaa tgaaatgagg aggtcggcat 180
 gcatagaggg tgcgcagatg gctcttgccc gtgtcaagac atactgggcg gagatgaagg 240
 ccaccgatgt tggatcccaa gattcggacg gaagccgagt acgtgtcgag cactattttc 300
 aggaagttct gcagggcgct cgtttaatag agacgcagtg ctcgaaggat attatgttcg 360
 aataacatgt attattgtga aacaatgtat caatgggata taagagcttt ttatacttgt 420
 gcctctc 427

<210> 9709
 <211> 433
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-B8

<400> 9709

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 acatagaaca agggattacc tcgctttgat accaattgaa agtatgttat atcgactaga 120
 ggggggtgaa taggcgattt ttatgaaagt cttcaaaaaca tgggagtttt gaagacaaac 180
 gatagaaatg aacctataac catgcagcgg aaggtagact accctagaca agccatgatc 240
 aagtattcaa tgaagtgaaa gcacaaagac taacatcagc taggcagtac ggatcaggat 300
 ggaagataat atgaaaccaa tctgaacaaa cagtcacaca gtgaagacaa atggacaatg 360
 caaataggca atgacttcac aaggaccaac tgtaaataaa gagatgggaa ggatagaacc 420
 agtgaacttg gtg 433

<210> 9710
 <211> 421
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-C1

<400> 9710

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 agtgccttat tgtcaaaggt gtaaaattcg tgggggatgg atataccaac tgtgaagctt 120
 ccggtgttgg taggtgtgag atcaacaatg gaagatgctg gaaagaaact aagaatggga 180
 agacaatatc tgctgtctcg catgaagaat ctgaaggttg caaatgtcca caacgtttca 240
 agggcgatgg tgtaaaaagc tgtgaagata ttgatgaatg caaagcgaaa tctgcctgtc 300
 agtgcaatgg ctgcagttgt gagaatacat ggggaagcta tgaatgcagc tgtggtggta 360
 acaacatgtt atacatgaga cagcaagaca cctgcatcag caaacaagct gcctcctcag 420
 t 421

<210> 9711
 <211> 439
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-C4

<400> 9711

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 ccagcgcagg aaatcagggg atgcaatcat cctacagatc cagttcgttt cctgcacctc 120
 agtatgcact gcagagggag aatgtatttc ctgggagacc tgatcagcca gaatgcatat 180
 actacataaa gactggagat tgtaaatttg gtgcagtttg caaattccat catccccggg 240
 tgcgctcaca gcctccccca gactgtatct tgagcccaat gggctcttcca ttacgcccag 300
 gggaagagct ctgcaagttc tactctcgct atggcatctg caagtttggc gtaaaactgca 360
 agttcgacca tccgatggcg gctccgatgg ggggtgtacgc gtaccggtac tctgcctccg 420
 cgtcgcccaa tgctcccat 439

<210> 9712
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-C7

<400> 9712

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 tgctgaggat gctggtgcag gccccggcgc aaaagattat gtgcatgtgc gcatccagca 120
 gcgcaacggc aggaagagtc tgaccactgt ccagggcctg aagaaggagt tcagctacaa 180
 caagatcctc aaggatctca agaaggaatt ctgctgcaat ggcacagtag tccaggatcc 240
 ggagctaggc caggtcattc agcttcaggg tgatcagcgt aagaatgttg ctactttcct 300
 agtccaggct gggattgcga agaaggagct catcaagatc cacggcttct aagccgaagc 360
 cgctccgat aaatgctcga accgccagcc ggctcttctc tatattgaag gcataaggca 420
 tatatatatt gccgcccgt tgt 443

<210> 9713
 <211> 403

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-005-Q1-E1-D5
 <400> 9713
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 cgctggggac cggcaagtcg cgagttctta cctcgaaggc gtcattctgg caaaccaaga 120
 tgggggtaac tgtcctcgtg ccttactttc ccgagtaagt cctccctca accggcccgt 180
 aacatatgaa ttcttacatt tcgatcgttt ttcttttaac attccgtgtt ttctgcagtg 240
 acacacgttg cacgctcatc ctctaagcc ccaaatttc catggccacg tatttcgacg 300
 cggaccgtca gtcgaacgta gactacacaa atgtcaagaa agttcttgat gatgttctcc 360
 ccggctacgc caaatctggg aggaccttca ccaggcctat tcg 403

<210> 9714
 <211> 449
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-005-Q1-E1-E8
 <400> 9714
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 agggtcagca agaacgcaga tatcgccaag atggtcagaa ttgggtgcggc ttgatttggc 120
 tcactacagc ggctcctctc ctctgtcgtt cttgccggcc aagccaagct ggacatggat 180
 gtgtgggtgt gcatgctcac tgtgaagtac gttctaggcg acctctttca gttcgatgtg 240
 tgtgtcact gtgtgggtcg ccatctctct atcctgcaa gctacaccag cacttgttgt 300
 ttcctctccc tgctgcaatc agtggttgta gggacggaca agatggaggc atggagctgg 360
 cgactggata tgggaaggga gctgctactg cacttgggtt gcttgacagc tgccgttgtg 420
 cctgtacttg gacgggtgca gatagtga 449

<210> 9715
 <211> 456
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-005-Q1-E1-F6

<400> 9715

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ttttatattt tccaaaagtt atctacgtgg attttttaggt cattctgaga actttttattt 120
tctgcacaat aaacaacacc atggcagttc tgctgaaaac aacgtcagtc cagggttagtt 180
tcattcaaat catgcaagtt agagtccaaa acaagggcaa aaagtgtttg gaaaagtcga 240
tacgttggag acgtatcaac tcccccaagc ttaaaccctt gcttgcctc aagcaattca 300
gttgataaac tgaaaatgat aaagaaaaac ttctacaaac tctatttgct cttgttggtg 360
taaatatgta aagccagcat tcaagttttc agcaaagatt atgaaactaa ccacattcac 420
agtaacactt aggtctcaca tatcaatggc ataatc 456

<210> 9716

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-F7

<400> 9716

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cacgtctctg gtcaataacc aatagcggaa cctggatgct catattggct cccacatatt 120
ctacgaagat ctttatcggt gaaaccgcat aacaacatac gttgttcctt ttgtcatcgg 180
tatgttactt tccccggatt cgatcgtcgg tatctcaata cctagttcaa tctcgttacc 240
ggcaagtctc ttactcgtt ccataatata tcatcccgca actaactcat tagttgcaat 300
gcttgcaagg cttatagtga tgtgcattac tgagtgggcc cagagatacc tctccgacaa 360
tcggagtgc aaatccta atctcgaaatgc gccaaaccaa caagtacctt tggagacact 420
tgtagaacac ctttataat 439

<210> 9717

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-G5

<400> 9717

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 cttcccgctcg gttatcactc ggcggagcag ataatgtgtc taaagtctca ccaaattggct 120
 tattaacaag gagatctcca tctttccatt caagatcctc tctttcttct agcagcagct 180
 tgatactaaa acacgctaaa ggaacttcaa agtcatttga tgggtggaact aggtcacaag 240
 acaggggaaa ggtccatggg aatggatcac atttacttaa caaatctaca gatgcagtta 300
 aagatcgtga agcgaatgat ggttggaag ggactgtgga tgagggaact aatgaaagtc 360
 caaatagcaa tgcagatcag agaagtaatg aaaccacaaa tagcaactca attgaaatgg 420
 tctctggttt cctgtataat atgttgacg 449

<210> 9718
 <211> 434
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-005-Q1-E1-G6
 <400> 9718

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 atactgtcga tgcattttt gtggtcttct ttgtagaaag cagcctatag atagaagaca 180
 tccacgtggg tagtatttca gctctctcgg cattatgaaa tgggtgtaca aatatagcat 240
 caagttacac gacaaaaagt tcccatcgat atctcataag agctttccac caaaagaaag 300
 agaatctcgt atcaattaga gattttccat atccgaggaa ataaacatat agaggagagt 360
 gaccttttac tatgaggaag cagacagcag tatgttcatg ctattcggtta ctaacattaa 420
 cggcgaggaa ttaa 434

<210> 9719
 <211> 458
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-005-Q1-E1-G7
 <400> 9719

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agcccaaaag cagaggcgcc gtacataccg tgctcacgga cgcacatc cttacatgtc 120
caacccctgc cacattgagc tgatcttgtc agagaaggaa gagcctgtga agaaggaggc 180
tgataacgtc gtcgcaccaa ggaaagctat ctaagctacc ggaatggatg cattcgtcca 240
acagtcttag ttgtagttct tctcaagtac ctttgttggc agtgtttgtt gcctccttga 300
tgtttttgtt accaacattg agtaaggatt tgtaagggtt gatgctatcc ttgtgattgc 360
gagtgggtctt tatatgctaa aacagtttca gatatttgag catcaaaaaa aaggagaggg 420
aggaagaaaa aaaagcggcc gccctagagg atcaaagc 458

<210> 9720
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-G8

<400> 9720

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acaaccgaag tgtctgtctg gggtttctgg tgtgcggtcc cacttccagg tagatgatgc 120
tgctgttgca acgaacagca gcttcccagg tccaccgtgt gagagtttagc accagatgggt 180
ccattgattt ggtgtggctg agcagggttc ctgggttgag tgagctgagt gaagcagtag 240
aataaagtgg tgaggatgta gtgtagtgtg gccccggcct cacttgagtt ggtaggttaag 300
taaggtgtac cagcagcagc agcagcagca tctagtgcac gtagtagaaa tgaaactggg 360
tccccagctt tgtagatagt cctggtga 388

<210> 9721
<211> 397
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-007-Q1-E1-A1

<400> 9721

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gcaagtttga ggtccacggc gccatgtttg cgctgctctg ccaaaagaac agcctgaaaa 120

atttggactc gaggttcctg atatcttcat tggaggaggt cctaactact gtgcgctcac 180
ccttgaatgc tgagcagaag ctgatcacca ttgagtcctt tgtcaggat agtccaaggc 240
tgcggcggat ggtccttagg atctcgcaga tgaagaactg ccacgaggct gcagatgaat 300
tctttgaaga ggtttccaag tttgcgcata tgagtaatgg cagagtgcgg attgaataag 360
aggggtgccg ctgcatggct cagtgccttg gctcttg 397

<210> 9722
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-A11

<400> 9722

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ctaacaacct ggaccagcat tgccaatatt gtcattacac atgccagaga atcgctcgga 180
ctgcaggatga taacgaggct catttctttg aggcactgag catccattat gaactccaaa 240
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catcaatgat tcgagtcaca gtggatcttg acgaatcgcc acgcgctgtt ggaatcgaca 360
ccccgtcag gaaatcatgt gggtcgggtg gccgctctat cggtcgggat gacttgcttc 420
aggatatcca ctacatgact ttc 443

<210> 9723
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-A5

<400> 9723

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gggctttgcg tcattggcgc aacgagtcac ctagttaaca ttcaatgaag aaaggatgt 180
gctactttga aggtttatgg tttatggttc atggcccaga tccaacatgt gtagctttcg 240

agagtgtgta ctgaaaccaa gtgtggtgtt ggtttctgtg aatagacatg acaagagaag 300
atcgcttgga gcagtctgca cgttgttgtc tcattcaccc atgtatgtat atacaacagt 360
tgttgctgga tataattgta tctatagtcc tcatactcgc cggtgacgtc gaactcattc 420
ctggaact 428

<210> 9724

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-A8

<400> 9724

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cccgtgctat gttacttggt ctttctaaca tcggtggcca agtacagccg tagctttagg 180
agagtgcac caaggcacia aggtgcgaat tgtacaaata ggagtaggga aagggtagaa 240
gcaaagaata tgttcctggc atggtagtaa atatgagatg taaacgcact cgtagtgcag 300
ttaatcgat tttttgtagc tagggtgtca tagttttgat gatcggttcg gttgtatggc 360
tactcttata agccacgctg gaggtgctgc cgtttttttg ttccacgtgc atgataacaa 420
gatggaagac ccttcgg 437

<210> 9725

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-A9

<400> 9725

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cgggccatgg tggtgggttt tctggtgtgc ctccacagc attagtccga agcttacata 180
ggggaaagag cttcaagttt ggatctctgc agatttttat ggagaacgat ggaagttgcy 240
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ttaggttagc gaatgctgat cgatcatgagg ggaacattct agtgtccaag gaagaagggtg 360
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gtacctttga gtggcttta 439

<210> 9726
<211> 445
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-007-Q1-E1-B10

<400> 9726

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taacttaatc aaacaaccca tatatgttta aactcagaat tagtatagtt caataaggcg 180
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aaatcaagtg atcctttttc ctacatattc acaatgacct ctaccgtgtt gtaaatcaat 360
atttcatttg tccanacctt ttanatttga ccaactctaa ttcaaatttg gatctccata 420
agatcatatc ctgcanaccg tatat 445

<210> 9727
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-B2

<400> 9727

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ttcaagtacg cctgggtgct tgacaagctg aaggccgagc gcgagagggg tatcaccatt 180
gatattgcc cgtggaagtt tgagaccacc aagtactact gcaccgtcat tgatgccct 240
ggtcaccgtg acttcatcaa gaacatgatc accggtacct cccaggctga ctgtgctgtg 300
ctcatcatcg actccaccac tgggtggttt gaggtggta tctcgaagga cggccagacc 360

cgtgagcacg ccctccttgc tttcactctt ggagtgaagc agatgatctg ctgctgcaac 420
aagatggatg ccaccactcc ca 442

<210> 9728
<211> 437
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-007-Q1-E1-B4

<400> 9728

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ctggaggagc cacgcagaac tctatcaggg ttgcccaatg gatgcttcaa actcctgggtg 180
caacaagtta catggggttg attggaaagg acaagtatgg tgaggagatg aagagtgccg 240
ctaaagctgc aggagtcact gtcactact atgaggatga ggctgctcct acaggcacat 300
gtgctgtctg tgttgttggg ggtgaaaggt cattgattgc aaacttatct gcagcgaact 360
gctacaaatc tgagcatcta aagaagccag agaactgggc actagttgag aaagcanaat 420
acatctacat tgctggc 437

<210> 9729
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-B6

<400> 9729

ggtaccggct caggaattcc cgggccgacc tcccaggcaa gaaaccaaac tggtttttgg 60
tcacgcttgt cattcttctt aagcgggtgt caatgactct ctcccatagc ttcattgtat 120
ggctcatcag cttaattcca cggttaattag tacaactctg aacatcccc ttgttcttga 180
agattggtac taatatactc cgtctccatt cttctggcat cttgtttgcc cgaaaaatga 240
gattgacaag cctgggttagc catactatcg ctatgtcccc gagaccttcc cacacctcaa 300
tggggataca atccgggccc atcgcttgc ctcccttcat ccttttttaa gctccttga 360

cctcagactc ctggattcga cgcacaaaac gcatgctggt ctcatcaaaa gagtcgtcca 420
gttcaatggg agagctttca ttct 444

<210> 9730
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-B7

<400> 9730

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tataactttc cacctgtaat catatgtatt atgtattgcg gatggaccag ctgattcaat 180
ggttgacaga aaggactcaa cctgcaaaca agaccattgt tcccaagggtg gtgaaataca 240
ataccctggg ccacatcttc cagaggatat ttggtgtcat atatattccc tactgccaat 300
gcgagattgt tttccgttac tacaatgcca aagtctgtaa cattgatagc tggtttcagg 360
ctgctgttac accggggatt gaagaactca ctatagaact atcttcaaag tcaggaagat 420
attacaactt tccgtgggtca ctttt 445

<210> 9731
<211> 429
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-007-Q1-E1-B8

<400> 9731

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tgaagtactt ctgggacacc ttgctggacg ccgaccttga gagcgacgcg ttgggctggc 180
agtacatctc cgggtctctg cctgatggcc gtgagctcga ccgcattgac aaccgcagc 240
ttgaaggcta caagtccgac ccatacgggg agtacgtccg gcgatggctg ccggagctgg 300
cgaggctacc aacggaatgg atacaccacc cctgggatgc acccgagtct gtgctgcagg 360
ctgcaggaat tgagctaggt tccaattacc ctctcnccat tgttgagcta gatgaagcca 420

aatccagat

429

<210> 9732

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-B9

<400> 9732

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tataaaagtt tattaagagt acaaagcacc tcaaacacaa ttaaaaaatat gtcgaggtct 180
ctaaacaacc aaacgaccat taccgcccgc ggaatggctc gccgacgcgt ctgtgtcgcc 240
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gttcgtaagg acctgcgcc tggagccgca ggcattgccg ttgaaccac aaatagattt 360
gaatcagctg acaccaaata tcaccgttgt gcaagcacia tgagaaatcc taacctcacc 420
attccaagaa gacaacatga atccaca 447

<210> 9733

<211> 454

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-C1

<400> 9733

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aacgactcac tagacagtgg tagcaaagtc atatcgctca ggctcccacg agcaatgtct 120
gcatagggca gttaacagga cacctgggtc gaagacggcc tggatgcgcc tccagttggt 180
tcgccgtaag ggccagtact catcgaggag gcgacccttg gcatgcatac aattgtgctt 240
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agtacttgta ggtagagtcc tcattacccc actaggagtt gcgcacataa ataccactca 420
acctgagctc agctctctcc tcaacagtaa acct 454

<210> 9734
 <211> 422
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-007-Q1-E1-C10

 <400> 9734

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caccggcctg gtgtgtggaa agtgcattgt gaagccgctt ctctagatcg tgctcgatga 180
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aaatgggtgt gtagatgcag atgcagttgc agatcgggtc gtgaggtcgt tcatcttgat 300
gtatatggca gttggctatc gtagcccatc tggtagtgcg taccggtcgt gtagtcacgc 360
tcgatgcaca gaggccaagt catgttgcac gtatcacctc gtaggagatt gattcatgtg 420
ga 422
  
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<210> 9735
 <211> 410
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-007-Q1-E1-C5

 <400> 9735

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cacgcgcgca gttggcacca acggatctct gcatcgctcg ggtccactgt ccggttccat 120
gtcgcgcact cgttcgggat tggataggac ctatcattgc gctccggcgt atttacatag 180
caacatcgct catgtatcac ctgtcttgca atatgcacgc acatcgctcg gtcactgatc 240
acgcaccgct tccttgctcg tcccctaata ctttgtactc actcgcttct gattccatgt 300
catccgctcg gtactgacca cggattcacg tctaactgcg tctccggacc gccaggatg 360
aaaatcccag ttccgctcat gattcattgt cacataagtt tgcacgcacc 410
  
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<210> 9736
 <211> 446

<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-C6

<400> 9736

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tccccatctt gctcgttctc cattggatag aacacatcgt tgaccctccc gctggtgcgc 120
cgtcgcgcac aaccgtagcc tcaacattgg aatcacccca acgtgctcta gttgtagcct 180
tcgccagttc tagcaccttc ccgaggctgc ttaccgccgg ggatgaagca tcctcaatca 240
acagttctag aaacccatct taccggttcc aacaaattac tttaccacct ctagcacctc 300
catcgcaaat tggctactac caaggatgta gcatgccaaa ttcattttct atttttcaag 360
tgcccaaat gagtttttgt gaataaccta gcaataatt gtcacaaaat tggaccacgt 420
caattttata aaatactacg ccatat 446

<210> 9737
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-C8

<400> 9737

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gttggcgccc tctgcgccat gaacaggatg gtagaccct gtcacagctc aatctccgtc 120
gttggtgggg acgagctgta tgccatggcc atcaaccgtg gcctgctgcc caaggtggac 180
tattttaagg ctcttaccta tggccgctcg ttccggccact gccagccaga ggactggcac 240
tggcgccctc tccagccgcc tccccttgaa tacgaccacg agaaggatca acgctacaac 300
cccactgcgg cgctgtgac acaccctgt gctattggcg catacacggt tgttcgtgat 360
tcacagatct ggatatctac aacgggcgct ggcacgtact cctttgacac aactagcagc 420
gtgtggagaa agattggcga g 441

<210> 9738
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-C9

<400> 9738

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ggcaaccgac gaggttgctc aagcaaggcg gtagcccttt gtgccgttgt tgaggtagcc 120
gagagcgtgg gtggaggagc cgtggtcgag gtatccatgc gaagaatgac atggtcgatg 180
tcgagttggg gtagccggtg tcgaggaagt cgccgtggag ccgcgggcgc aaagaggcgc 240
cgagtttagtc atgggagcag tagtggtgca ccggggagaa gacgttggtg acgacgcgtt 300
gcgcccgggt tgccaagagc ggggacatat cgtagacgaa ggcatgcacc agtggtgcca 360
gcaccgggca tgcgtagatg gacgaagacg aagttgacga agcgccgcac cagacttgcc 420
aggccccggg acacg 435

<210> 9739

<211> 455

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-D10

<400> 9739

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atttatttgg tccagagaaa acaacatggt cagtatcttc gaaagccaca aagcagttgg 120
ctatcactcg ttgtccgaag atcttgtgca ttcatttggt acgtgcttct attagttttg 180
atggtgaact cgtaaagcgt cagggaacacg tttcttttcc tttacttctc aatttatccc 240
catttgcagg aggcacattc accactggac agggacctgg accttcagct atgaacgtgc 300
aaaaatatga cagccgtct ctcaaattct ataggcaact aaatgcacac atgcccatta 360
atatgtttcc tactggtggg aactcatcaa gtcaggcacc taaggatcaa gtaacaaatg 420
gtggtgtcca ctacttaat gagggaaatg ctgat 455

<210> 9740

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-D5

<400> 9740

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gctccggccg tcatccacca ctagcttttg tccacaccgc cgcggcggcc accaacgacc 120
actttggcct aatcatggtc cgcctgcgct tcatgtccga tcaagctttt ccaataatgt 180
tcggcaccgc gacaaccacc atgaccaggt ttggcctgat ccttgtcggc gtacacctct 240
tatctttgag agggcccaac agggcgtttt aattcgttct acaactcact tctgttagtt 300
ggctctcaag atgcttattg attttcgtag cctaggggtg tataaattgg tcaaactgtg 360
tttaaagagg cgaggtttta ctatttaatt ttctaacgat cctatactat aacagaagtg 420
gatggtag 428

<210> 9741

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-D7

<400> 9741

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caacaaatgg tgatgccagg ccatcgtgag tcaaacctgc agaaggaact gaacagatac 180
atccctactg ccgctgcatt tgggtggagtg tgcacggcg cattgactgt tctcgtgat 240
ttcatgggcg caattgggtc aggaaccggt attctgttgg ctgttaccat catataccag 300
tactttgaga ccttcgagaa ggagaggcg acagagcttg gtttcttcgg gttttgattg 360
atacatgata gctttgggag catgttatgg ctacagcaca gcttgagtct ttctagacag 420
tcgcagcac 429

<210> 9742

<211> 441

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-E11

<400> 9742

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 ggcatgcac aaagcctcgg tattcagctc gcacagcttg ggaaggatgc ttctgcagca 120
 ggagctgcac gcagaggtaa tactcagcgg aagacagttg aggtcgagtc tgttgcagct 180
 gcagggaagc aacaagctag agaagtagtg aagaaatctt tccgtgccga gttcctcgag 240
 aagctgcaca aagatttgga tgacgatatc gatgtgagag ccttggaataa tggatttata 300
 tctgtcactc ctctgaatgt gcacggccgt gtcgagtctg aactcgaagc tccagcgtca 360
 gactggctgt cagcagctgt gtctgtatcc gaagaaaagg aagctccagc gacctaacaa 420
 acacgcagaa atgtacactg t 441

<210> 9743
 <211> 378
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-007-Q1-E1-E2

 <400> 9743

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 agatcgagtc tgttcttcat acctatagtc cagcaaaaag ccactagtcc tagtccgagt 180
 ccagtaattg ttgcattgtt ctcgatttcc agatcacgcg atactccgag tcgtgacaga 240
 gaaggactcc ccaacttccg agccatccgc agaagaaaaa tagttccaat ttcaaaaaaa 300
 aaactaagtc tggaaaattc tggctaggca gtttttagac catttgtaga ctttttcgaa 360
 aaaaaattgt tgcggagc 378

<210> 9744
 <211> 443
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-007-Q1-E1-E5

 <400> 9744

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tgggectcct agcgcgctct ggtgggttgt gctcccctcg gggaaccccc caagcgcagc 180
 cagggcccggt cgtgttcctt ctggaacata aaaattctcc gtaaagtttc atggcatttg 240
 gactccgttt gatattgatt ttctgcatg taaaaacat ggaaaaacaa aaactggcac 300
 ttggcactat gtcaataggt tagtaccaaa aatggtataa aatgattata aaacatccaa 360
 gattgataat ataacagcat ggaacaataa aaaattgtag atacgttgga gacgtaccaa 420
 catccccaag cttaatcct act 443

<210> 9745
 <211> 442
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-007-Q1-E1-E7
 <400> 9745

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 gctaacaagc aagatcttcc caatgccatg aatgctgctg aaataacaga taagcttggt 180
 ctacactctc tgcgtcagcg aactgggtat attcatagtg cttgcgccac aagtggggag 240
 ggtctgtatg aagggttgga ctggctctcc aacaatatag ccagcaagtc ctgatagctt 300
 ccaatggatt ggcagagccg cagaagcgac tggcggctgg acaaatgact ggaatatgta 360
 ggcatgttaa agtgctgcca gagtggtgac atgtctttgt aagctctatc tttgagcagt 420
 tatcacactg ttactatggt gt 442

<210> 9746
 <211> 438
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-007-Q1-E1-E9
 <400> 9746

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 gaatggtgtg gacttgaata gagaagcgct gctgccttat ggaggctctt gcagtttctc 180

tgtgagacat ggggatcctc acgactcatc gtccttcata atagagccaa ttgagctatc 240
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 ttgtacaaaa catgtataga ctggatgtag tccaacttgg gaggagcttc ctcaggttgc 360
 gtctcacaaa ccattttcgg ctagaaacta ggaagatcat atgtttccac tgcaaactcg 420
 tatgccacca caaactgc 438

<210> 9747
 <211> 87
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-F11

<400> 9747
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 cataatggaa gcctcctcgc acccact 87

<210> 9748
 <211> 436
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-F2

<400> 9748
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 aatcacaggg gcatataatt tgtcaatccg cgccgtgggc aagatctgcg tcctccatca 120
 ttgccattca tggacttggg acagagcttg ccaaattggc accaacggca atcgtgacct 180
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 ctaactacca ccgctggag accagcccta ctaccatatt tgacattgct cgcgtcactc 300
 aacatgtagc gattgtggc ccatctgcat acacgtactg acgataagcg tgctcagaca 360
 tgacatatgt caaggctgaa gtcagcaatg gcatacatct atgccaatga ggacagcttt 420
 gatttcactg tcaaga 436

<210> 9749
 <211> 442

<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-F5

<400> 9749

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tggcagcaca acataaattc atgctaaacc atctcttttc ggattgttgg ttgtttcatt 180
gttattccct acggtgtagt tgttcgctg atgtatcagt tcaagatgtt tatgtgttct 240
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taccatcatc gtgtgacgcc tacacctggt aaaggaaaag aaaatcgtgt ggcaccaaatt 360
taaattcagg aaaaatactc acgcgtagac atgaaaaata tacgcatgct tgtagaatta 420
tacggtagaa tgaaatgtac at 442

<210> 9750
<211> 307
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-F7

<400> 9750

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atcttgctg gcagcgtctt attatggtgc aatgctggga tcaactgcgat cttcatattg 180
tggttgctca tagctatttt cgagagttga gtctgtcgta caatagatat ctccagacat 240
gcttgatgat gtgatttgat gaacctgcat tgccaagaga gcacagctgt ataacctgaa 300
ggaaagt 307

<210> 9751
<211> 379
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-F8

<400> 9751

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 aactatcatg gtggctggta aacattgaga atggttgaca acattctcaa tcccaattaa 180
 gcatcatctt taaaacccaa caaaattaat taaagtaaca tgatgagatt cacatgaaaa 240
 tccaagtact agatactcaa aacgtccata actggggaca cggctaataca tgattagttt 300
 atacactctg cagaggtttg tgcacttttc cccacaagac tcgatctcct ccgttggttt 360
 tctcgtacta catggtgtt 379

<210> 9752
 <211> 439
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-007-Q1-E1-G3
 <400> 9752

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 ctgcggtttt gcttttgtaa gaccacatt cttaacaaag tactaaactt tttttctttc 180
 tttttagttg ttggatctgc ttccactttt gaatgttggtg tttagatctc attgtttgcc 240
 accctagttc aatagaacca tagatttttg gctagcgatg gctctgtcat acgttattcc 300
 ttttaagtag tttttttata aggcataatt tttcaatata gtggcatata gttgggtaca 360
 tatggcttca caatacgtct ttctcataag aaaattttat cataggctaa catagtgcaa 420
 tagaacagtt tgctatttt 439

<210> 9753
 <211> 424
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-007-Q1-E1-G4
 <400> 9753

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gccatgagca acattgaatc ttctccagaa gggtttaata tgctgcgccg catgtatgaa 180
 actgttcaag agccatttat gaatgcaacc acaatggctg gggagggcga cacaaatgca 240
 aaccatttg cagctcttct aggaaaccag gggcttaacc aagccagaga tccaactgga 300
 gatgcaccaa ctactgctcc tgctccaaat actaatccac tcccaaatcc ctggagtgca 360
 aatgctgggg ctgcacaagg agcagcaagg ctttctgctg ctgcaaggag tgccacaagc 420
 ggtg 424

<210> 9754

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-G5

<400> 9754

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 ggccgcttca atcaatcagt gttgattaat cggcgtcgga tccgtcgatc taagagatcc 180
 atgccatcaa gagatggggc ctcgtatgga gtgcagttca gacgagtcgt cagagctagg 240
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 tgtggcgagg ttccggcgcc acaggtttag atgcccgttc tgccccggga agaagaagca 360
 ggactaccgc tacaatgagc tgcttcagca cgcaattggg gtggggcgcat ccaaccgtgc 420
 tgccaaagtg aaggcaaacc atcag 445

<210> 9755

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-G6

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 gtaccatgct ttcttggcat cagaggccat aatcaagcag atccctcgtc tccttggccc 180

tgggtcttaac aaggcaggca agtttccac tctggttagt caccaggaat ctcttgaagc 240
 caaggtcaac gagacaaaag ctacagtcaa gttccagcta aagaaggttc tttgcatggg 300
 tgttgctgta ggcaacttgt cgatggacga gaagcagatc caacaaaaca tccaaatgag 360
 cgtcaacttc cttgtgtccc tcctgaagaa gaattggcag aatgtgaggt gcctgtacgt 420
 gaagagcacc atggggaagc gtgtacgt 448

<210> 9756
 <211> 446
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-007-Q1-E1-G7

 <400> 9756

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 ccatgacacg gtgcaggcag ggagcatatc aggatactgc tgctcgctg ctccagcgca 120
 ggcggagcta gcagcgagga ggagaaggga gttggggcgc tccggaggag aacgaaggga 180
 ggcggcgcac gataggaacg agagggagat cgagagaagg aggagggttc gagcgcacgg 240
 gatgggatcg ggctcctccc tgacggcgct agcagtgaac gggagatgaa gaggggatcg 300
 ggatacggcg gctagagttg agaaggcggg ggtcggctgc gcctaaagta acaaattggg 360
 cagaagaaga ggttgggagg cccaggtggc cagaggcctg gttgggctct ctctccgtta 420
 ttccttttag aaaaaaatt gtttat 446

<210> 9757
 <211> 448
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-007-Q1-E1-G8

 <400> 9757

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 tgaagcatgc gaagtaatca gtggatacgc ttgttctgct gatatttacc ctgaagtcaa 120
 gctcgataca aatcccgtct caggtcccggt ggcttcagag cccgttgaca gagaatacga 180

agagtataac agccccaaaa cggttttccg tgaagaggcc tgcgatgac ttggaggaga 240
attctgtgaa cctgactttc aaaaagatgc caactagaag aaacaagatt ttatgtcatg 300
tgaatatgtg tttgtatttc tacaagtctt tgtaaccact ccttaattta tgatatctag 360
cttcactact taatcaagat tgatgttata aaaaanaaan anaaaanaaa aaaaaaaaaa 420
gcgccgctc tagaggatcc aagcttac 448

<210> 9758
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-H3

<400> 9758

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gcatacagtg cgattagcac ttgacctctt tcagcccatg tgcaaagtac aggaaagttg 120
gatcagcagc tccctccttg tagtaggcga acaccacgcc gccatcatca tgcagtctct 180
cgccaacaaa gaactgaagg tccttgagct tgctaagaag atactttgtg gcggactcaa 240
cattcttctt gaaagcatct aggtcatccc cttcaagctt ggcagagagg ttcttgatgt 300
agcgcttcat gtgagagata aactgcttct tgtcaaaagc aggttgctcc tgaagacgga 360
aggtgtcaac aatgtcaacc accttcacgg cctggtcac aacaccctca tcatcaccac 420
caccctcaag cagaggattg 440

<210> 9759
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-H6

<400> 9759

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tgacatctgt cccaacgggg agccgacacg tgtttctctc agccaatgat gatattacac 120
gtgggaaatc ccattggcc ggggctgtta acgggttatc ggatgcataa cccgaccgga 180
tagcttaacg gtgttccgtt acgggtgatg ccacgtgtcg gtcacccttg acgaaagcag 240

ttctgtggca cacgatttat cgtcatggaa gtgtacacat ccgtgatgat aatttttgga 300
atgtcatcga acacttctac gacagcacag gtatgactat cttgattctg tcataaattt 360
gtcatggatg tacatgcatg acaagaaatg cgacctactg tgacaaacac gtatcatcac 420
ggaagtgtat attttttgta gtgag 445

<210> 9760
<211> 242
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-008-Q1-E1-A12
<400> 9760

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gggtacttcca tcagcacacg aacaatccca gtcagtgaga cggcactcat gggaaggata 120
cccatgcaga gactgagctg gactgatggt gttactgact gcctgttcgc cagttgacgc 180
cagatccgtg cccacattgg ccgatcagat tcaagtgcag gacaagttcg atctgtctac 240
ga 242

<210> 9761
<211> 445
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-008-Q1-E1-A6
<400> 9761

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tggccatgat gtgctcctcg actagtcatg cgtgccttgt tgctgcaaaa cggcatgcaa 120
agcacatggt cctctattgt ggataatgta tccggtgctc tcagttag gatgctatcc 180
atgttcccaa cctaaaaatc atcataactt ttgtaaagta gatcagccta aatcatcata 240
acttgctca agatcccaga tgcattgctt gtcttcagca accagaaaca gcaactcacc 300
tctgcaaaga ctgtcccttc acggctcggg tttggaacca ggtgaactct tggactaacg 360
aaggcgttcc aatctcgggc ttctcccgg agccaggaaa tgtgtctgac tgggtgggaca 420
agactctgaa ttcccagtc aagca 445

<210> 9762
 <211> 470
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-008-Q1-E1-A7

 <400> 9762

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 caaggatacc ttccgtgggc gtgtttgtga gtgccctatt gtcaaagggtg taaaattcgt 120
 gggggatgga tataccaact gtgaagcttc cgggtgttggg aggtgtgaga tcaacaatgg 180
 aggatgctgg aaagaaacta agaatgggaa gacaatatct gcctgctcgc atgaagaatc 240
 tgaaggttgc aaatgtccac aaggtttcaa gggcgatggt gtaaaaagct gtgaagatat 300
 tgatgaatgc aaagcgaaat ctgcctgtca gtgcaatggc tgcagttgcg agaatacatg 360
 gggaagctat gaatgcagct gtggtggtaa caacatgtta tacatgagag agcaagacac 420
 gtgcatcagc aaacaagctg cctcctcagt cggctggagc ttcattgtggg 470

<210> 9763
 <211> 448
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-008-Q1-E1-B2

 <400> 9763

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 gggtagcctg cctcgagttc agcaagggtg gcttcgtctt ccgtgagcac aacagctccc 120
 ccgggtacta cgacggccga tactggacaa tgtggaagct gcctatgttc gggtagcactg 180
 acgccacaca ggtgctgaac gaggtggagg aggtcaagaa ggagtaccct gacgcctatg 240
 tccgtgtcat cggttcgac aacctgcgcc aggtgcagtg cgtcagcttc atcgccctta 300
 ggccaccggg ttgcgaggag tccggcaagg cctaaactac gagttgaaac aatggcctat 360
 ctctgatgaa ggtcttttgt gaacttcact tttgtccaaa actctgctgt acgactctgc 420
 tttctgaccg gagcatacct tttgttct 448

<210> 9764
 <211> 462
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-B5

<400> 9764

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 tacctcagat atcaaccgtc caacaatgag atagatggaa cgctacaaat gcaggggtgac 180
 aacgactgtg atttcatgac catcacgaca gacggcgggt tcatccacgc tcctgtccga 240
 tgagtcgagt cgaaagtagt gatgtgtagt tctgaaacat tgattggctc atgttgtaat 300
 taaagtttaa tgaattcgta tgtctctttg gtttggacag tcattcaact tagatgtaat 360
 tgatgctatt tattagtagg agcatgaatc gtgctattaa tgtctttctt ttctcttctg 420
 atccttttgt tgcatactta catattcctt atgtaatttc tg 462

<210> 9765
 <211> 444
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-B7

<400> 9765

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 cccttggtgc gagaatggaa ctcaaaatcc cggcggcgaa tcaaggcgca tcagcttggt 120
 gctccatgtc tttgtcttgg agctgtacag gtggagatga aagtgcccggt cgggtgtactc 180
 ccgctcaacg aaggccctgc ggagcacggc gatgaagaac atgtcctagt cgcggcggcg 240
 cagcaacgag acctcgtggc cgaagaaggt gaagtcgggg ggcgagtgga cgagcttgac 300
 cgacggcgga gtgttcttgg tgccggcctg gtagacgaag tagcggatgt tcttggcgta 360
 catgtactgg cgctcggggc agatggtgat gcagagcaag gcgaggccgt cctccgtgta 420
 gcagaccttg gggatgctgc cgta 444

<210> 9766
 <211> 464

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-008-Q1-E1-B8
 <400> 9766
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 gtgagatttt acagtttttc gtagtttaga tcgagtttgt tcttcatacc tatagtccac 180
 gaaaaaggca aaaaaaatta gggtagttc atcttatccg aaccaatctg agcctttgca 240
 taatcttttt ggcctttgct ttgttgaatt tgccagtga tcacgtgtc aagttgctgg 300
 tcctagagtc tagcccttta gagttttgag ttctgtcac aagttgtcac gtcgccgccg 360
 caccatcgtc atcacagctg ccatatacca ccacgtcat cgcgctccc atataccaca 420
 tatccaccgc ttatccgcca ccgcttcgaa tccgtatcca tata 464

<210> 9767
 <211> 332
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-008-Q1-E1-B9
 <400> 9767
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 aaggtttctc agtgtccgta tagttgcgt ggtttcaggc tcctattact agctggttaag 120
 gcagtcttct cccgtgaacc tcgattggat tttcacgtta tgatcttgca cagtattgca 180
 gataatatgt agtctatcca aacaatgctg agatgatcta cgggattaac tcataagaca 240
 tgtgtgggat atagtattgt cgtcatatag gatttggaca cacatatgat acgatattac 300
 aacttagtac gtccattgac acaccttagt cc 332

<210> 9768
 <211> 300
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-008-Q1-E1-C2
 <400> 9768

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gtcatagcat gttgggtatg taggggtccag gcatgtgat ccctcggcgt tttgggaggt 180
tttagcgttg tgcattgtg acgtcattgg tactagtga taggtggtct ttgcaatgta 240
gacggtgcac ttgggtatag ttaatccaaa ccagtcagt gtttgaatat cgtctgtgat 300

<210> 9769
<211> 89
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-008-Q1-E1-C8
<400> 9769

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ctgatctgca ggatttcatt ctcttgtt 89

<210> 9770
<211> 440
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-008-Q1-E1-D10
<400> 9770

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cacctagggt tctacccta catcactgct tgcataccat cattccaaat aagcacaggg 180
gtatttctgt ctttgatgaa atacaactaa ccatacagga actttttact gaaattgata 240
tggacatcat cataatggga ggttggagta cacagacaca aaggattgat atatcttcag 300
aatgcaact cacaatatca gtagttgcat gtattgcctc aaagaaggtc tgaacttatc 360
ttgtcttaga atgaaacaac ccgaggcaac catattcaca cttggagtac taacagcttc 420
aattagcctt gattatatac 440

<210> 9771
<211> 468

<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-D5

<400> 9771

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ttgggcagcg ctggggaccg gcaagtcgcg agttcttacc tcgaaggcgt cattctggca 120
aaccaagata aggataactt cctcgtgcct tactttcccg agtaagtcac cccctcaacc 180
gccccgtaac atatgaattc ttagatttcg atcgtttttc ttttaacatt ccgtgttttc 240
tgcagtgaca cacattgcac gctcaccctc ctaagcccca aatattccat ggccacgtat 300
ttcgacccgg accgtcagtc gaacgtagac tacacaaatg tcaagaaggc tcttgatgat 360
gttctccccg gctacgtcaa atctggaggc accttcacca ggcctattcg taagtacggc 420
aagcacgtgt tctcccacaa tacgacattc tactgctgca agcagccg 468

<210> 9772
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-E12

<400> 9772

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tgagactcgc cccgcgtaca ttatatgcc tcttgtaaga tatcagaatt gttcagtcta 180
gctgttttcc gatgaggttt tacttttttg tactttgtta gatctatctg tgctttatcc 240
tggaatgcta ctggcaataa tgtgtagctg tgaacatata aatgttgtat aaaatgttct 300
gccttgagaa aaccttgcag cagggatttt tgaagcggcc gctctagtgg atataaactt 360
atctacgctt ccatgcgacg tcaagcttct t 391

<210> 9773
<211> 110
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-E5

<400> 9773

caaaattccc tataatgagt cgtattagca tttaatgcat atcctcactc atctttgttc 60
ggaacttggt accaatccag ttattatcat gatctaaatc ttttgatacg 110

<210> 9774

<211> 455

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-E6

<400> 9774

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aggcattggg aagtaataag tagatgatgg gttgctagag tgacagaagc ttaaacccta 120
gtttatgagt tgcttcgtaa ggggctgatt tggatccaca tgtttcatgc tatgggttagg 180
tttaccataa tacttttgtt gtagttgctg atgcttgcaa tagagggttaa ccataagtgg 240
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aagtaccgaa tgcaatcat atgaatgtga tgaaaactag cttgacgata ttcccatgtg 360
tcctcgggag cgcttttctc tatataagag tttgtccagg cttgtccttt tctacaaaaa 420
ggattggggc accttgctgc actttattta ctttt 455

<210> 9775

<211> 394

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-F12

<400> 9775

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ggttacaagt gaacacatca tgactttcag cagttggctg gcaacacgtc tcacaggtga 120
gaacactgtt tgtgctgagc tatactcgtt gtccagggga ccatcttcga ctgtattgac 180
ttacaacgga tatgagataa atgggaatgc attttacacg atcgcccaag atcaatagag 240
catcaaccac aacatcgggtg ttcgctttga tgcagcaatc aagatgggaa aggacacata 300
ttatggttac atagtggaca tatcggaact tgactacgga catgatttta aggtcccttt 360

gattaaatgc aaatacgtca atctgtcacg aagc

394

<210> 9776

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-F2

<400> 9776

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taaggggctg atttgatcc atatgtttca tggtatggtt aggtttacct taatacttct 180
gttgtagttg tggatgcttg caataggggc taatcataag tgggatgctt gtccaagtaa 240
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gcggttatat ctctacgtg ccggagcaca acttagaggc ataaccgcat agtaggcatg 360
tcgcaagagg ggtaatcttt acacatcca tgtactgaac acaaagaga taaagagttg 420
gcttacaatc ggcacttcac acaataaata aa 452

<210> 9777

<211> 465

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-G6

<400> 9777

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gatgcaacct cgacgtggac cgtataggcc atttctacca gaacttggtg cagacctgga 360
tctgtgaatt tgccggttga ttgaagtgcc atgtaattga cgcatttggt aagtcagctg 420
tcacctgtac ttgatggaa ttggttgaac taaatgctta tccgc 465

<210> 9778
 <211> 478
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-008-Q1-E1-H8

 <400> 9778

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 tgtgaagagc gttaccggaa gcaagatcct ccgcatactc aaggctcatg gcctggcgcc 180
 ggaaatccca gaggatctgt actttttgat taagaaggct gtggccatta ggaagcatct 240
 tgagaggaac aggaaggaca aggactccaa attcaggctc attcttggtg agagcaggat 300
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 gtctaccact gccagcactc tgggtggctta agagggctct tcactctggtg tgctcttacc 420
 ggcttcagga tggctctggt ctacatatta tcaatttcac gtaacgtttt tgagtttg 478

<210> 9779
 <211> 347
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-008-Q1-E1-H9

 <400> 9779

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 caagatgaca gacctaaggt aagtttgggt gcccgcggtc atcggcccta tgacaagaag 180
 aaggaagagg cccccagcct gacacctgtg cccctccca tcaaccgacg tggctatcgg 240
 gctcgccccg ccacagcaac tgtgggcat aagaaagtgg agagaaagcc ccctgacgct 300
 gatggctgcc tgcacgcgga cccgatctg ggtgtgttgt gtcctac 347

<210> 9780
 <211> 446
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-A5

<400> 9780

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cggagacttc attccgtgca ccggaactct ggcttggctg tggctgggtt agcagcagac 180
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tgcacgttg acgttgccaa gataatttat ggtgtacacg acgaagcgaa agacagatct 420
tttgagctgg aactgagctg ggtatg 446

<210> 9781

<211> 473

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-010-Q1-E1-B1

<400> 9781

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aaggtgcaga agctcgtcct caacatctcc gtcggcgaga gcggcgatcg cctcactcga 120
gctgccaaagg tgttggagca gctgatcggg cagtcgccag ttttctccaa ggcgaggtag 180
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acgaggaact tcagtgcac tggttgcttt gggtttggga ttcattgagca cattgatctt 360
ggcatgacgt atgaccacgc aaccggcatc tatggtatgg acttcttcgt gggctctggag 420
cgagctggat accgcgtctc ccgccggggc cgatgcaagg gccgtgttgg gat 473

<210> 9782

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-B10

<400> 9782

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tctccgaggc gacggcacga ccggaaagta cgaggagtgg gaccgtgtgt accgctatga 180
ctactacaac gacctcgggtg agccggacaa gggccatccg cgcccgggttc tcggcggcac 240
ccaagaactc ccctatcccc gtcgttgcag aactggccga cccccaacaa aaacagaccc 300
tagatcagag agcagaattc ctcaagtaca gatacaggag gccctgaaca tctatgtccc 360
gcgcgatgag cgctttggcc acctcaagct gtctgacttc cttggctact ctctcaaggc 420
catcacccg 428

<210> 9783

<211> 72

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-B11

<400> 9783

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agtttcgatg ca 72

<210> 9784

<211> 466

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-B5

<400> 9784

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atgttgagtc catggattat acgcactctc acccttcaac cattgctagc ctcttggtgc 180
gcgcaacttt cgccggtacc atacaccac gatatacctt cctcaaaaaa gacaccatac 240
ctacctatta tggcatttcc atagccattc cgagatatat tgccatgcaa ctttccatca 300

ttccttttat tatgatacgc atcatcattg ttatattgcc ttgcatgat catgtagttg 360
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<210> 9785
 <211> 471
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-010-Q1-E1-B6
 <400> 9785

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 acaacagaag ttttttgctt atcgtcttct atctgagtgc tctaggttca tgttgggagt 120
 ctttttcttt tgaaaactgt tgggtgtgtg gactgtgcct gatgatggcg tacgtaatat 180
 gtgcggtacc tgtttaggtg ctcgcagtgc agatttgggt gacattcaag ttttcgcccc 240
 atgatctgcc gttcctgatg acggggcgac atagtgggtt tcttgttatt gctctgaact 300
 cgcgtttact ctttctctag tcctgatagt ttcagttcct gagacagtgt atttccgtta 360
 tgaaagtaat ggaaagagga aaatccggtt cgacaaagac gtctatgggtg ttggctgggg 420
 agcctttata tttgccagct ttctttaccg gtttgttcgc aaagcgattt c 471

<210> 9786
 <211> 421
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-010-Q1-E1-B9
 <400> 9786

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 gaaataggat gggacagcga gagagaggag agagagaggg agggagaggg gtagagtgc 120
 ggatgggtga tggagttgct tctcgaagat ggtgggagag gcctagtaga caaactgagg 180
 gtggaactgc aatattatca ataagagtgg ggatgtgttt ctgtgtgtgc ctgtgcgtga 240
 tagatctgtc gggacacatc catggatgat gaaggggaac catgtgtttg gtaagctaac 300
 ctaactagat cggtagatta attgttggtt gtcggaggaa gggagagaca taactaatga 360

ggtagatcga tcgacgcgtg ggaaaaaacg agttataagg acctaactag ctatatgtat 420
a 421

<210> 9787
<211> 449
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-010-Q1-E1-C1

<400> 9787

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atcgtctaca taggccacta caaggccagc gaggacagaa agacgctggc cttcttccag 120
cggttggaat ctttggacgc cattgttcag aagcacgtcg acctgaccac gagagacgct 180
gctacttagc tgccgttcgg tgggccggcg ccctgagtcg aagaggtgga catcatcgat 240
ggatgcatct cttcttcttg cctcctgtta ccagcactgc atcgctcgt ggccttaatg 300
ttttattagt atagtactcc ctccattccc aaatataaat ctttctagag attccagcga 360
ttgactacat acggagcaaa atgagtgaat ctacactcta agatatgtct acatacatcc 420
gtatgttgga gtccatttga aatacctaa 449

<210> 9788
<211> 54
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-C11

<400> 9788

acatcactac accctatagt gagtcgtatt aaccagcgag cggtccgagg tcgg 54

<210> 9789
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-C5

<400> 9789

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aatgaaaata attggactct tcctgagcca attcctgagg caattcctga accaattgag 120
ccaactcctg agcctattcc taaacccagt cctaagaaga gaggtgttct atttctcagt 180
cctgaagata tgcaagaggc aaagaaatca atgaaagaaa aaggtataaa agctgtagat 240
gttaagaatt taccacctat tgaagaaata catggtctta atataccgcc tgtcgaagaa 300
acacattgtc ttgataaccc gacacaggta gtaaaggtaa attctctcta tagatatgat 360
aaagttgaaa tcccgtctaa taaatttc 388

<210> 9790
<211> 388
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-010-Q1-E1-C8
<400> 9790

actcgtagta catcacaaca ccctatactg agtcgtatta agcgatgaat gagatcaatg 60
cagctgcaag gatgaggggtg gctgcaaacg agaaggcgga ggctgagaag attgtccaga 120
tcaagcgtgc cgaggggtgaa tcagaggcca agtacctgtc tggcctcggt atcgcccgcc 180
agcgccaggc cattgtggat ggcctgaggg acagcgtcct gagcttctca gtcaatgtgc 240
ctggcaccac tgcaaaggat gtgatggaca tgggtgctgat caccagtac tttgatacta 300
tgaaagaggt cggcgcgctc tccaagtcct cggcgggtgtt catcccccat ggcctggcg 360
cggtgcgga catcgccacg cagatccg 388

<210> 9791
<211> 367
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-010-Q1-E1-D10
<400> 9791

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gtcacaccgg agcccagccc cgaagaaggc caggccggaa ggttgggact ggatagggtc 120
gcgccggcga agaagacgcc caacttctcg cagcgggaga tttccttctc gctgaggctc 180

atacccgagc tcgtacagta gcggtgtcctc ttctcggata gtagtatcca cgggtgcgccc 240
 gtgtaggttg accaatcttt gacacctcgg aactgaaacc ccaaggcccg gatgcggcat 300
 gtaaatacagg gccaccacga cccgtccgat tgtttgcatac anggtgaaat ccactagtgt 360
 ttgtgcc 367

<210> 9792
 <211> 395
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-010-Q1-E1-D2
 <400> 9792

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 atcatttctt ccatcgagca gaangaagag agccgtggca atgaggaccg tgtcacactc 180
 atcaangact accgtggaaa gattgaggtt gagctcacta agatctgtga tgggtatcctc 240
 aagcttcttg attccacact tgtccctca tccactgctc cagagtccaa ggtcctctac 300
 ctaaagatga aggggtgatta ctacangtac cttgcccaggt tcaagagtgg aactgaaagg 360
 aaagatgctg ctgagaacaa catggtggca tacaa 395

<210> 9793
 <211> 463
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-010-Q1-E1-D6
 <400> 9793

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 gaacgatact cccaccaccg ctgcctcacg ataggattcg gtgaatttct ttgcaccatg 180
 gccagagga gcagctctat gtactccgc gcgactctct tcgggagtat agccaccttt 240
 tcgctctgtt gcagatattt ggccatggat gtcgccgtca tcgctagtgt gtccttggtg 300
 tcaaaccaag actgtatctc caacatccta gctagcttca caaggtcgcg ttctgcaatc 360

ctcatgtatg tgttgtaetct ctccatcgat ctacttctcc acagcacctt cactcgccgg 420
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<210> 9794
 <211> 377
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-010-Q1-E1-D7
 <400> 9794

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 caaccactgc tctcaacata aacgaccctg ggcttaattc tggccttttag attatgattt 120
 ggttttcgctc tcaagtatag tatgtttatg aatagatcac gtactgctta catgtgtgtc 180
 cagttgtccc aacttgtttc tctattgaag attggaactg tttttttatt agaacgaaca 240
 gacatgcccc tacgttgac catgagaact aaatattatg tgctcgtcta tcaccaatct 300
 cataatgoga ccgtcacttg tgtgcaaaca attagaagtg ctgttttata cttgcgcttg 360
 tccctaattgg gcaatgt 377

<210> 9795
 <211> 283
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-010-Q1-E1-D8
 <400> 9795

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 cagaacgagc gatgatagcg aaattagga atcgccctgaa agatggcgaa agccgtatat 120
 gtggactgag tctttggacg atgctttgag acaagtttcc caaagagcag gatccagagt 180
 tcagtaatga agcatatgtg agcccagtag ttcacatctc gaaatcatgc gcaacgtttg 240
 cgcttatccc tagcgattgc ttatgggatg tcattagcgc gaa 283

<210> 9796
 <211> 452
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-D9

<400> 9796

gtaccgctcc gagaattccc agggtcgact tccaccaaag cgaaatccac catctcatcg 60
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ttttacagtt tttcgtagtt tagatcgggt ctgttcttca tacctacagt ccacgaaaaa 180
gccacaaaaa aaattagggg tagttcatca tatccgaacc aatctgagcc tttgcataat 240
cttttttaggg ttttgctttg ttgaatttgc cgttgcatcg tcgggtctagt tgctggtctt 300
agagtctagt ctttttagagt ttcgagttct ggtcataagt tgtcacaccg ccgccgcacc 360
atcatcatcg cccctgccat ctaccaccac cgctccgaat ccgtatccat ataccaccac 420
caatccgtgt ccatatacca ccaccgattc at 452

<210> 9797

<211> 453

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-E11

<400> 9797

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agtccgcagg gacatccacc accgcgtggg tcggcgaagc tggaggggct tacaacagtg 180
gccaccacct tgtaactgat gcatttgtgt tcagtttctg gtacctggat caactcggga 240
tgtccgcaa gtacgacaca aagagttatt gcaggcaa at cttgggttga gggaattacg 300
gcctgctcaa cacaacaaca tttgaaccaa atcctgatta ctacagtgc ctgctatggc 360
atcgctcat gggaaccaag gttctctcca cgacattcaa cggcacaac aagattcgtg 420
cttatacaca ttgctcaaaa gattcggaag gga 453

<210> 9798

<211> 459

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-010-Q1-E1-E4

<400> 9798

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tttttttttg ctactttcct ctgtttttca tcgctttttt ccttttagca ttttttacca 120
ggccgtacct gtaaacttca gattatctac aagatgtgaa cagaagatac agatgcaacc 180
gaagtgacca ggtgacatac tactccaggt ggaattaaag gcaagtgtgg ttacgcacca 240
ccatacgtgc aacagtagca ggtancgttg tctggacaca ggagtagtct tgggtggagta 300
ttacgatgca acgtgcagtt ggggacgcga caggcggaaa ggcggcaggc gcgacaatcg 360
gcaacaagtg aaacaggctg atgcaatctt gctttgtttt tctcagatta tgaatgagct 420
tgcgatagaa aaagtacggc ggacaaaaac agattgatc 459

<210> 9799

<211> 236

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-E6

<400> 9799

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tggtccgact tggaaaaggt cgtcaccagg attattggcg tctcgacctc ggtttcggaa 120
gcagtaaatt cagctgggat tagtctttct ccggcgacaa ctgtaacact atcatgcaat 180
atttcatgaa gatcacatga gttgtgaatt tagtacaatt taatcgctag gtttct 236

<210> 9800

<211> 278

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-E7

<400> 9800

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tggttaagtg tgtggcggtg tgtgtttgtg tgtatggact aggtggctct ggcttggggg 120
cagatctgaa cagaagagga aatagacgga accgtctgaa tcccagagac acggtgaagac 180

gttgaggga aatagaggcg ctctagagga tctaagcgta cagtacgcgt gcatggcaag 240
tcatagctct tcgatagtgt cagctaaatt cagttcag 278

<210> 9801
<211> 461
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-F3

<400> 9801

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atatcaacgt gtcagacccg ctcgaggaag gttgcaagct tgggccagtt gttagtgaag 120
gacagtatga gaagatcaag aagttttag cgaatgctaa aagtgaagggt gccaccattc 180
tgactggggg tgtcatgccc aagcatctgg agaaaggttt cttcattgaa cccacaatca 240
tcaactgacat caacacatca atggagattt ggaggaggga agtcttttgt ccagtcctct 300
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gtctggctgg tgccgtgatt tctggtgacc gtgagcgatg ccagagatta gccgaggaga 420
ttgacgctgg atgcatttgg gtgaactgct cgcaggcttg c 461

<210> 9802
<211> 470
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-010-Q1-E1-F4

<400> 9802

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cagggatgac aatcagtctt ctcgttgttt ctgtgtcatt ttttgtgaag gacaacatag 120
aggaagcttc tcatttacac tttgtgatga gtatgctttc actggctgga cttgtggcat 180
ttgtgcttgc attttccctt ggcatgggag ccatcccatg gattataatg tctgagattc 240
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cgtggctcat cacgatgacc gcgagcttga tgctaaactg gagcaacgga ggaacctttg 360
ctatatacgc cgcggtgtcc atgggcaccc tcctctttgt gtgcctgtgt gtgccggaga 420

ccaaggggaag ggacctggaa gagatcgcg tctcggttccg ctgaagcccg

470

<210> 9803

<211> 201

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-F5

<400> 9803

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tctgacatct tgttggatgg gaacacgacc atggaagggt tcatcatcct cattggggct 120

cctgggatga ggcactacta gttcaccaca taactatctg tccgtacgca ctcatcccaa 180

ttcctgattc cctctcttta t 201

<210> 9804

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-F8

<400> 9804

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tcagataggt cccacgcact cactcccgtg tatgaggctg ctacaagatc tggcactgaa 120

gatcaaccat ccccttctcc aaaaactgat tcagaagagt ccgataccaa ggatgtggtc 180

ttaccaggag tcaatctcat atttgatggc gctcagctgc acccgttcga cattggcgct 240

tgcctccacg cccgccaacc cttgtcattg ataactgatg cgtcggacgc gtcattggcc 300

atgacatgac tgatatgcat ctcagcacgt tgccatcaca atttctgttc cgtttaatct 360

atgtgcggaa ttgaatattg gtgtagacga ct 392

<210> 9805

<211> 397

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-G10

<400> 9805

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ggacattatc gatcaacgac gacaactggg gaaagtacat atgggtggctg acttaggcat 180
tatggattta agactccggc tatggcatgg cgaagtcata cccagcagct acatcgggct 240
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ctcacgatgt acatctgcca tgatcaactca gctcgtctc gatcctgaca agtgatgtct 360
cccctgacga caccttgctg cttctgcgcc gccaaagc 397

<210> 9806
<211> 439
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-010-Q1-E1-G2
<400> 9806

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ttcttccttc ctttcccttc gccgacatcg cagcactcaa ctgccgccat ggacgcagga 180
acaaacctca gatttggttct gacctctttg tagttcttct gctcacattt cttccttcca 240
aagtccttct ccagtcggcc aaacatccac tacagaaaaa ctggaaaaat ggatgagttc 300
tcatttttca cagatctgtc aagaaggaca aaacgaagaa aagaaaaaag gggagagaag 360
aacctgtttc acgtgtcaga actaggtagt taaagcagaa taccaccag aaaatcaaaa 420
gatataataa caatgcgtg 439

<210> 9807
<211> 483
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-010-Q1-E1-G4
<400> 9807

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ctccatagcc cgctcaatc tccacctgc cctccttgct ggtatacatg catctcatc 120
 agtctgttcg ttgtacaact tgtagtgtcc acaattcaga agtaggagtt cacagaaaac 180
 tgcttctctg aatcactcat cgttcagttt cgttctcttg tggtaattc aaagatccat 240
 tgccacaaat gtgaatatga gtgcaaata gcttgtcttt tgaactctgg aactgttgcc 300
 tatacatgcc tattattgct gaatatgatg gaaatgtgga tgtttaagac ggagtattta 360
 tcaggaagaa gcttatagga cttccaataa gcaagaagtt tcatataatt ttcttgatg 420
 caataggatg aactttcatt ttattggaac gtgctatagt ataaatttca aagaccact 480
 tca 483

<210> 9808
 <211> 478
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-G5

<400> 9808

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 taataatatt ttgtgttaag gtttgtgatt cccgaagcat gcacgtttag tctctcatta 240
 tgctatgaag ttggagcatg atttattatt gattgtcttc cttatgagtg gcgggcgggg 300
 acgagagatg gtattttcct accaatctat cccctaagg gcatgcgtag tagtactttg 360
 ctttgaggga taataaactt ttgcaataag tatatgagtt ctttatgact aatgtcagtc 420
 catggattat acacactctt acctttccac aatttgctag cctctacggt accgtgca 478

<210> 9809
 <211> 451
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-G7

<400> 9809

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tctggcctcg gtatcgcccg ccagcgccag gccattgtgg atggcctgag ggacagcgtc 240
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ttcatcccc atggccctgg tgcgggtgcgc gacatcgcca cgcagatccg cgatggtctt 420
cttcaaggcc agtctgcctc tgacaactag c 451

<210> 9810
<211> 400
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-010-Q1-E1-H10
<400> 9810

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gatggcaaga acaacgcgta cgtgaagctg acacgagact acgatgctct tgacgtggcc 180
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gttcttatgt tattggaatt ttgtagttgt tacttagcaa agggccttaa tggttccatt 300
gcctaccata tcgctgcaca ctttcatgaa tttgatgcaa tcgaactgac ttgtgttgat 360
actaatatga gctttgcgtt tggctctacc taagtcaggg 400

<210> 9811
<211> 453
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-010-Q1-E1-H3
<400> 9811

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gctcagatct gtcattggagg aaacgcgatg caggtgtgat ttttcatac aaagaagctc 180

tccttttctg cttgatgaaa actcacaaga tgctatcgcg ttatcttcta tcttctcctt 240
gctgcacatt ttccctacct tccaccgagt cagtacttgg atccaagtct ttcttattgc 300
tacttatttt tattttgcta ctaaattgat gcaggtgcta ccagtgaaag gattggagat 360
tggttctagt agttgtaggt tcgtttggaa ttcataatgc tcatgatttg caaagcctat 420
cagccagaac acgttgatgc atagcattaa atg 453

<210> 9812
<211> 482
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-H7

<400> 9812
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aagacagaga ctttcccggt ttccttcggg taggcacgaa aggcacacga ggatgatcat 240
tatcacaagc atgtccattt ccaacagcaa agaagtttcc aataagcatg catgcaaattg 300
atcacatcac cacatagaat agcgagttct acgtattgag gtgggtgtcat aatcgtgtca 360
aacaatacat gcaaaatatt atgccagggt tcagaatgct tgccttcaag gtgtggaaat 420
gcagggtgca ctccaaaact ttgaaagct ttctcctctc tccaaaaatc ctatttagaa 480
tg 482

<210> 9813
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-H8

<400> 9813
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cggggcacta ccagtacttc ctctgtgtca ctggagacca ctctactcct gttgagtacg 120
gagaccacag ctttgagcct gtcccgtttg cgatatgccg gctgagagat ttcgtgggag 180

cgattgggga gggcaatgtg atgaataccc cctcgcagca tttcccgtg ccttcgggta 240
aatccggaga agatttaact gatgattcag aaccagcgga acacaagcct gaggagcgta 300
aagcttttag cggcgataca gtgtgtgaat acaccgagat tgctgctgca aggggctgcc 360
ttgggcgggtt ccctggaagt gagatgatgg gcatcatcaa gaagttcatg aaagcaaagg 420
aacattaacg ccagttogat tg 442

<210> 9814
<211> 348
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-011-Q1-E1-A1
<400> 9814

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acgcagtctc atctccggcg gatataaaaa tgtcaatgga gacagccgtg cctcacggcg 120
catcatgtcc tcgattgaag aaactgagga aagacctggc atccatgacc gggtcagact 180
catcaaggaa gaacatcgga agatatagac tgagcttaac aggatctgtg atagcatcat 240
caatctgctc gaaaccacc ttataccgtc atccactgcc cctgaatcca cagtccctta 300
tcgatctatg ggtgatgact actactcgta tcgtgcccaa ttcattgag 348

<210> 9815
<211> 437
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-011-Q1-E1-A3
<400> 9815

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ttctttccac agtgctatca tcattctccac aaaaagaggc tctagaggat gacttgacta 120
ccaccctggg ccagcaatgc cgacagtgtc aatacacgat ccggagaatc gttgaaactg 180
caggtgataa tgaggctcaa ctcttcgagg cactgagtat ccacgatgaa ctccagaaag 240
ttctgtccaa gtacgaagac ctcaaggagc ccatcgctgc agagcctgag ccagaaccag 300

cgatgattcc agtcacggtg gagcctgagg aatcnccacg cgctggtggc aaagacaccc 360
cctcgaggaa atcagctggg tccggtgggc gctctagcgg cggggatgac ttgcttcagg 420
atctcgacga catgac 437

<210> 9816
<211> 455
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-011-Q1-E1-A4
<400> 9816

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tgccgggaggc caccgaggtg ggcataaccc accagggcgc gccaggtgg gttgtgcccc 120
cctcgggcac ccctcttgta ttttcccagg cgcgcctagg tgggttggtc cctcctcagg 180
catccctctg gtatttcttt ggcccatctt gtgtctactg gtcgagaaaa atcaccaaaa 240
agttttgctg catttgact ccgtttggta ttgatttccc acgaagtaaa aaacaagcaa 300
aaaaagaaca actggccctg ggcactatgt caataggta gttccaaaaa ttgtataaa 360
gttgctataa aatgattgta aaacatccaa gaatgataat ataacagcat ggaacaataa 420
aaaattatag atacgttgga gacgtatcag cattc 455

<210> 9817
<211> 136
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-011-Q1-E1-A5
<400> 9817

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aatataatgg catgaatact tcataaatta tagatacgtt ggagacgtat cagaagcata 120
tacccaaacc tgcccc 136

<210> 9818
<211> 472
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-011-Q1-E1-A6

<400> 9818

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catcgttggc agtctgcgcc atcaagtctg ggggtgctcag gggggaaccc cagatctggg 180
tcttccggat cggatgatga tggcgttcta tcactttccc ttctgggggc atcgtcttgg 240
agcaagtgct ggctggaggg atgggtggagc ggtgtttcat cccaaacttt gatggcggcg 300
gagatcgatg gcatggcgct gtggagactc ggcgtccaac atgcggagat gggctcgcgc 360
aagangaggt tgctgtctgg cgatcatggtg acgtcgatgg cagaatggcc agacagggta 420
naagccctaa tatgatctng agacatgtgg aagatggcgg ccacgacaca cg 472

<210> 9819

<211> 438

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-011-Q1-E1-A7

<400> 9819

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tccatactca gcgaaaatag ccgaacgaag ttgtagtga gcggatgaag gttcaacata 120
gcgtggatgt catcaaaccg caggacgatc gtacccccga tggagttatc cacaaagccc 180
ttgccctatg gcaccttggc cgcgaaaacc gggtatgcca catccttctc tccgagacgc 240
cgcttctcca aagaaagaac actgtcatgc agactccgca tagcaccggt tgcagcattg 300
agcatatttc tcagtagcat cagcctaccc gccacatgca ccctcctega gatatcctca 360
ggatgaaggtg gccatcctg agcacgaatc gtactcgggt cgggctggcc cgcaaccttg 420
ttagtctttc ttttgcgt 438

<210> 9820

<211> 471

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-011-Q1-E1-B1

<400> 9820

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tcattcagct attaacatgt atttctccat cagctgctgt ttagagcatc taccattatg 120
atagtcatca tagtggattg ctgtagagtt ttatgtacat gagattggat tgttaaactc 180
ctttcacacg ccaagtagat aaagcggagc aaattattac atccgtttga atatctggac 240
tgcgcttatg tattttctga gacaacttat gtttgcttct cacactaatg attttgtttg 300
tttggggaaa caagttacca tagccgcctt gtcacctaag tttgctctgt attttgatga 360
agccttgggt tcagcaagaa gttagaggag gaagaagtaa agcgagcaat agagaatgga 420
tggattaaag actcaataag agatgttgaa gaaatctgct gatgcattta t 471

<210> 9821

<211> 467

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-011-Q1-E1-B2

<400> 9821

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tgcgggagat caaggtgcag aagctcgtcc tcaacatctc cgtcggcgag agcggcgatc 120
gcctcactcg agctgccaag gtgttggagc agctgagcgg gcagtcgcca gttttctcca 180
aggcgaggta cactgtcagg tctttcggca ttcgtcgtaa tgagaagatt gcctgctatg 240
tgacgatcag gggtgagaag gcaatgcagc ttctcgagag tgggctgaag gtgaaggagt 300
acgagctctt gaggaggaac ttcagtgaca ctggttgctt tgggtttggt attcaggagc 360
acattgatct tggcatgaag tatgacccat caaccggcat ctatggtatg gacttcttcg 420
tggttctgga gcgagctgga taccgcgtct cccgccggcg ccgatgc 467

<210> 9822

<211> 378

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-011-Q1-E1-B3

<400> 9822

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 tgagcatgcy acaagtacag gtcacgatt cgtaagacc tcaggtgcga ttgggatgca 120
 aatcaactca ttgccatctc gtgcacacac agctttgcat cacaaaatac tcagtgtcgt 180
 agaagttaat tgtagtcata gattcgacac atttgatcat ccaaacaggt atgtgtgtca 240
 ataggtgttc ctttcacgcy ttgatatgag gatgatctac gtcaaggag gttacgtact 300
 tgagaagtct gcttctaccg acaaaaagta gtcgccgac tagaggattc aagcttaggt 360
 acacttgcat tcgacctc 378

<210> 9823
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-011-Q1-E1-B6
 <400> 9823

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 agttcatggc tctgaaccgt ccaaactagc agaagacaga tacaccagat aagaaacctg 120
 ctcttgtcca actgatgtca cttacagtta cattgccgcy gcagtgaaaa gaaaaagaag 180
 ttatatccct ggggtccag aataaccgac gatgatgccc tgttcccggg tccgtgattc 240
 gtagtgcaaa cccaatcgtg aattgttgtt accttagatg tgggtgtatc aaatcgcaac 300
 catgacagac atttgttgta tcttgattgt gtgtgtaaag gctgggcgca tttgcccgtt 360
 tttcataaat cattagagat gtataaccgc agttccatcc aaaanaaaaa aaaaaaaaaa 420
 aaaaaaaaaa gcggccgctc tagagga 447

<210> 9824
 <211> 435
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-011-Q1-E1-B7
 <400> 9824

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tcaagttcat ccagaccgtc ttccccgaga actcgtagcg cctcggccaa ccatcactcc 120
ggcgaacgct ccagccccag gcatggcatg atcttccgcc actggcgggc ctgtgtacag 180
aacgaggaac gagggcatcc gcagagagtc ttctggaggg ctggattatt ttcaagcata 240
agcacaaacc atgtctttat tctgggaata aaggtggcat ggctgggtta tggaggatgg 300
agaatccacc gacgtcncgc tgtggaagag catctgactt tctgcgcgaa tatatgtgtc 360
cgtcgagatc angagcaatg tgctgggcat ctggaagatg tcgggaataa attcttggtc 420
tacttttggt gttcg 435

<210> 9825
<211> 449
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-011-Q1-E1-B8
<400> 9825

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cccaagaacc ttgagcccaa cctccgcac cttgctcaaa agtacaatga gaacaaacta 120
gtctgcgcga ggtgctatgc acgactaccc accagggcca ccaactgccg taagaagaag 180
tgtggccata acaatcagct aagggaaaag aagaggttta tgtccaagtt tgccaacgct 240
tcctaaacgt tggaaatatg ctgaatcaac cgtctagcgt catatatatt ggagtttaag 300
ttctgtccct tgtttgaagt catgttgat ttcgctgaat cgtctagcgt cgtcatatat 360
agtggagtct aagatttgc cagttgatag tcctggttga ttttgaacct atgtatgctt 420
tggaatatat tatctatcan atacctga 449

<210> 9826
<211> 425
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-011-Q1-E1-C1
<400> 9826

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agcggcggtg gcacgctcac tcacggtcc gcctaagttt tttctttcat ttcacggttt 180
ggcgggtgac acattgagca gttgacccgt ttgatcagtt gtctagttgc atgtttgact 240
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ttcttttaaaa agttcatgaa atcaaaaaat gttcatgcat ttgaagaaag ttcacaattt 360
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<210> 9827
<211> 454
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-011-Q1-E1-C2
<400> 9827

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actactatta ctccacacat cgaccgactc ctgcctacat ctagagtatt aagttcataa 180
gaacagagta atgcattaag caaggtgaca tgatgtagag gtatagactc aagcaatatg 240
atataaactc catcttggtta tactcgatgg caacaatata atacatgcct tgcaaccctt 300
tctgtcactt ggtaaggaca ccgcaagatt gaacccaaag ctaagcactt ctcccatggc 360
aagaaagatc aatctagtag gccaaaccaa actgataatt cgaagagact tgcananggt 420
actcaatcat acataanaga attcagagaa gatc 454

<210> 9828
<211> 468
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-011-Q1-E1-C8
<400> 9828

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gtgcatcatg tttaaatttc atttaattct gaaatgagga tttgtgaaac cctcaggatc 180
atctctgaaa atgacccaaa taaaaattgt tccaaaaagg tccaagaaaa tgctcatggt 240
gctctctgaa aatattggac agagataaaa atgaaaccaa tatTTTTtagt agtcataag 300
tctttatttt gggcatttgg aattaatgca taattatttg catttgatat atatttggtta 360
tatacataat atatgtccaa aaattatgcc atttataaag gagctctgga atatataact 420
agcctccata aaaattggca taagaaaata aaatgggtta gtattttt 468

<210> 9829
<211> 372
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-011-Q1-E1-D1
<400> 9829

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ggctttcagc gttgcatcgt tttaagtctg gtcagggtccc tgtgttgatc gctaccgatg 120
tggccagtcg tgggctggat atccaaactg ttgatcttgt tatcaactat gacatcccaa 180
ggtttccacg tgattatata catagggttg ggcgaactgc aagagctacc aggggagggc 240
tctcaatatg ctttgtgacc cagagggata tatgtctcct acatgagata gaagatgacg 300
tggggaatcg attcagtgca tatgagtgcg acgacaaaga agtcaccaaa gatattacaa 360
aggtattcaa ag 372

<210> 9830
<211> 479
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-011-Q1-E1-D2
<400> 9830

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tgacatagcc acccttttta ctcatgatga gaaaactcac tattacttta ttctcaaatt 180

atttcctttc tcattaaagg gtgatgctaa atcttggtat aatactcctg ctcttggttg 240
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 gaaacaagtt gccttatagg aaatatttaa ctttgtgcaa actaaagaag agaatctccc 360
 acaagcttgg gggaggcttt gccagttact tagttatttg cctgatcacc ctcttaagaa 420
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<210> 9831
 <211> 441
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-011-Q1-E1-D3

<400> 9831

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 ggaaaagatg aaggccaccg aagtggcaac cacaggcccg cccgaaggca aagatcatcg 180
 aaagccggag aggtacttcg atgacgtcct agaaggagcc tgagtgataa aggggtcaatg 240
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<210> 9832
 <211> 479
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-011-Q1-E1-D4

<400> 9832

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 ggcaataaac agagccactt tgcaacaatg caggaagcgg ttaggaagga tgtggagagg 180
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tcagaaactt tgtggcagct gatgacatgt tgtgctattc tgcacaatat gattgtcgag 300
gatgagggtg atggtgtagc ccaaaccat gatttcgaag cacctagaga acaagttgaa 360
atccccgaag atcaagatgt agctcaactg atgaactttc tgcaaatgca tcagaatctt 420
caagatcagc aagtgcatat gcaactactc aatgatcttg cagagcacat gtggaccca 479

<210> 9833
<211> 447
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-011-Q1-E1-D5
<400> 9833

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gaggcccaga atgagccagg tgggtcgggt cctcgatagc ttagcggata tcgacctaac 180
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gatgttccag cagatggtgc agggcaacca ggacgacagc tccgccttca gccagtatag 300
ctggatcagt cgcagtaggg ccgacgcoga ggccacctcc tcaaactccc ggatcttatg 360
accgtctttg tttccgtgct ccacatgtac gtagccattc ttctcgacc actgattcgg 420
ccgggctgtg ttatcgacca tcgaaaa 447

<210> 9834
<211> 452
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-011-Q1-E1-D6
<400> 9834

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tggcatcaga ggccataatc aagcagatcc ctctgtctct tggccctggt cttaacaagg 180
caggcaagtt tccactctg gttagtcacc aggaatctct tgaagccaag gtcaacgaga 240
caaaagctac agtcaagttc cagctaaaga aggttctttg catgggtggt gctgtatgca 300

acttgtcgat ggacgagaag cagatctaac agaacatcca aatgagcgtc aacttccttg 360
 tgtccctcct gaagaagaat tggcagaatg tgatgtgcct gtacgtgaag agcaccatgg 420
 ggaagcgtgt acgtgtgttc taagtgtgtg cg 452

<210> 9835
 <211> 455
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-011-Q1-E1-D8
 <400> 9835

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 atagaggttt cacagctgtt gagaacatga tcaaaggctg tgctgggaag tttgctatgg 300
 gagatgaagt ccaactggca gatgtattcc ttgcacccca gatttttgct gcggtgactc 360
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<210> 9836
 <211> 471
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-011-Q1-E1-E1
 <400> 9836

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 gaaatgagaa gagagaagct ttctagggct taagcttagt ggtagtgtcc tacagtcagc 180
 gtgtgtctctg ataccaactt tgtagcgacc agacctcaaa tggcctgtgc tgctgtgcac 240
 cagtgtcatc cctggatcag taatgctgac acgcacagta caaatggagg atttataaca 300
 gagtagcaat cacacactta ttacatcgat atctccaaag agattaagta tgataaacat 360

ggcttaaggc catctaataa cgataacagc agaagacttg gaagataagt gagtccatca 420
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<210> 9837

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-011-Q1-E1-E2

<400> 9837

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gtgcgcccag atgaagagca ccgtcgatgg cacctgcggc gggccatgca aaaagcactg 180
atccgttcag ggcttcagtc tcagacgagg ggtgccgcct aaaataaagc tcagatgaga 240
tgagcagtca tggggcctat gcttctctgt gggtcgtgct atacggccaa caatatgtat 300
actgctatcg tcgtgtcttg tcaatgtgtt tcctctctcg agaaagggtg tggtgcttgt 360
acttgtgttc acctatcctc cgtgaataaa cacatgtgat gattgtgtgt gcct 414

<210> 9838

<211> 342

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-011-Q1-E1-F1

<400> 9838

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cgcagagcgc tcctgtaaca cccacgatgc ggctatatcc cccacgtgtc gaggcacgac 120
ttagaggcat aaccgcattg tggttgttac aagttggtaa tcagagccat ccccgactta 180
ggagcccccc gcttgatcga atcgctgacg ttgttgagtc tagaaaaaaa tgctttgagt 240
cttaggatta tatatatcgg agagtaggat tctttttact cctcagtcnc ttcgtcgctc 300
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<210> 9839

<211> 455
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-011-Q1-E1-F3

 <400> 9839

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gcgaggacgt cgcgccttag caatcgctaa accaactctg agaggttatt gaccacgccg  120
gatcacgata aacctgacca cgagggtctg tttcctgcga gcaaacgaag aacaagcaag  180
aaactaagat tgcaatctgg atattgtgaa tataagatga aagctttatt gatcaagggtg  240
gggttctgtg acgcctttgt ctggtcgttg aacacaaacg aagtacgcga agttgcagct  300
atggcgaact ttaatctaaa caaaacccca aagtctaaac ggtgccctaa gggctgtata  360
tatggaggaa gagaggggga atttcgtggc ccttggtgga ngggtccaaa atcaacccta  420
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<210> 9840
 <211> 442
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-011-Q1-E1-F4

 <400> 9840

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catctccatg ggccatcaaa cagaggatgt tatcgggttt tgtgttgact tcattcctgg  180
ccttaagaag atatgtctcc ctaaategtg gtacgagggg agactgactg gaaaaggcac  240
tcttggaagt gactcaataa tatgcaggga caaatattct tgggtctcaag cacactacac  300
agttctatag aactctacct tggcgacccc gtatgtcgat gaacacaaga acagtctgcg  360
ctccaaacac ccggagcagt gggacgactg gattacatgt gaacacatca ggaccttcag  420
cagttggttg gaaacacgtc tc                                           442
  
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<210> 9841
 <211> 401

<212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-011-Q1-E1-G1

<400> 9841

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 ggtgccccgc atgtgtacga tggcttcctc catctgttgg tggcggtaca cgaggccgac 180
 atcgaccggg gctgcttga gctgatggct anggcgaggg acgtgacgac gtcacaactc 240
 aaggcggtgg ctgccatcgg tcaagtgtgg ctatcgagg ctgcccgctg tgtttcgttg 300
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<210> 9842
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-011-Q1-E1-G3

<400> 9842

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 gggaccctcg cctctatcaa gtggatcag atttccaggt tgctcgggtga gatattacag 120
 tttttcgtag tttagatcga gtctgttctt catacctata gtccacgaaa aagccaaaaa 180
 aaattagggg tagttcatcc catccgaacc aatctgagcc ttgcataatc ttttctgtat 240
 ttgctttgtt gaatttgagg ttgcatcgtc gtgttcagtt gctgggtctta gcgtctagtc 300
 ttttagagtt tcgagttctg ttcacaagtt gtcacgccgt cgccgcacca tcatcatcgc 360
 nctgcccac taccaacacc gtcgccatc cgtatccata tnacaccacc aatccgctgt 420
 catataccaa caacatatat 440

<210> 9843
 <211> 458
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-011-Q1-E1-G4

<400> 9843

ttcacgggtc gactcccaca gaaaacgata gccaccatct catcgaaaca tcgggacacc 60
ttttgcctct atcaagtggc atcagatttc caggttgctc ggtgtgattt tacagttttt 120
cgtagtttag atcgagtctg ttcttcatac ctatagtcca cgaaaaagcc aaaaaaatt 180
agggttagtt catcttatcc gaaccaatct gagcatttgc ataataatttt ctgtatttgc 240
tttattgaat ttgcggttgc atcgtcatgt caagttgatg gtcctagcgt ctagtacctt 300
agagtttcga gatctgttca caagttgtca cgccgccgcc gcaccatcgt catcaccgct 360
gccatatacc accattgtca tcaccgtgc catataccac catcatcatc aacgctgtca 420
tataccacca tcgtcatcat cgctgccata taccacca 458

<210> 9844

<211> 397

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-011-Q1-E1-G6

<400> 9844

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atagcgatcc caatagtggc gtacgatatg tatcacgcgg tgcacaaac atttgaaact 120
gtggcacttt cgcagtggc aagagcgggg tacgtgttaa tggatccact tctcgtcgtc 180
gtctcgctta acggtgttac gttaccgcgc aagaagattg tcggtcacc atgactacat 240
cacatctgtg acgcccacta tatcagtcac ggaaatggac atctctatga gtcgaattat 300
ggatcgtca ctgggaactt ccaggacagc acacgtataa ctatcttgca tcagacatac 360
catcctcaag catgtatatg catgacaagg cctgcaa 397

<210> 9845

<211> 370

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-011-Q1-E1-G7

<400> 9845

taccagtcca aaattcccgg gtccacaaag cgggactatc gcgcgtccgc ctcgagagca 60
tcaggaccgc ttactgtttg occagcacat cctagaattt gcgaacggca acaccattca 120
catggtcgta gactcaactc atcgaggcgg tgaacaaagt tggatgatagt tgtgacatct 180
caaactacac catcgacttg ctgcattcag gcgacgggca cgtaaatgac tacggcaagc 240
cagggcataa gtatagcggc agcatgtgga tgagattgat ctgtacctag tgttgacagca 300
agctgcagct ccagtgtgat aagtatagct gcattctgat caagccgtac cacactgagc 360
agatgcacat 370

<210> 9846
<211> 473
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-011-Q1-E1-H1
<400> 9846

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ggttctaggc aagtaggttg acatgttcat ctgttatcat gagtgcctg tttacacttg 120
cagttcagat attacgctta agctaaaggt ctgattgtac tgtctagagg tggaatggct 180
aagctctctt tatggctcctt tttgttgaat atcttgcaaa tggcacacta aagtgcagga 240
aattattagg tgtgtgggta tcaatccagt atgttcttat gtctatggat ccgggaaatg 300
ttcacgcttt attgggtttg gtcaacaaaa ttttaggtgt acatgctttc atcttgaata 360
tatgtaattc ttaagtaata ctacttctcg gttaattcat tgaagtaatg atacaatcaa 420
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<210> 9847
<211> 483
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-011-Q1-E1-H2
<400> 9847

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 gtttagaggag tgggtgtact angaggcgac tggcacggtc tgggaggcgg ggggtggtctc 180
 accagaggga atcggtgccg agcccgaagc ggatcggggc ggctcggagtc ggggaagaag 240
 gcctcctcga ggtttcccta gtagctaggc gtggctctgg tgagatgtan gagtgggtgct 300
 gggtcgaagg cgagctcgag gccccttttt atagccggtc cgaggcgggtt gccgagaacg 360
 ggataactcc ggcgatgatt acggtgaggc agtggtcgaa caagggttta agggtcgggg 420
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 act 483

<210> 9848
 <211> 457
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-011-Q1-E1-H4
 <400> 9848

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 gggagttaa tcagctcctt gttaatgcag tgaggcagga aatcaagaat ctgtacaata 180
 tcaacgtccg aaaggctcgt ctgatgggcc ttctctctgt tggctgtgcc cctcacttcc 240
 tctcagacta cggcagccaa aatggggaat gcacgacta catcaacaac gtcgtgatcg 300
 agttcaacta tgggctgaga tacatgtcca gcgagttcat ccgccagtac ccagactcga 360
 tgatcagcta ctgtgataca tttgaggggt cagtggacat actagagaac cgttgacgct 420
 atggctttct gaccaccact gatgcttgct gtgggct 457

<210> 9849
 <211> 472
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-011-Q1-E1-H6
 <400> 9849

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tgaaatccta cataaaactt gtggatcact gaatatgata tgtttgattc cttgcaatag 120
 ttttgcgata tagagatgat aatatgtggg aagtactagt aaaaagttgt agttagtaag 180
 aatattggtg taaagggtttc tgattcccga agcatgcacg tatagtctct agttatgcta 240
 tgaagttgga gcatgattta ttattgattg tctccttatg attggcggtc ggggacgagc 300
 gacggctctt tcctaccaat atatccccct aggggcatgc gtagtagtac tttgcttcaa 360
 ggtctaataa acttttgcaa taagtatatg agttctttat aactaatgtg agtccatgga 420
 ttatacgcac tcctaccttt ccgcaatttg ctagcctcta cggtagcgtg ca 472

<210> 9850
 <211> 424
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-011-Q1-E1-H7
 <400> 9850

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 ctggctatcg ggtgttgaca tcaatactca acagagtttc gaagctttga accccagggc 180
 agttgccgtc gtgatcgacc ccatccagag tgtcaagggg aaggtgggtca tcgatgcatt 240
 tcgtctcatt aaccctcaga ccatgatgct tgggcaggag ccacgtcaga caacatccaa 300
 tgttgggcac ctgaataagc catctattca ggctcttatt catggggtca atagacacta 360
 ctactctatt gcaatanatt accgncaaaa tgagctcgag gagaagatgc tgcttaaact 420
 tcac 424

<210> 9851
 <211> 332
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-012-Q1-E1-A1
 <400> 9851

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tcaaggtctg agatgacagc tgaggctgat ataaacaagt ggactttgta aacatgaaac 120
 tgctactttt cttgcccatt cttgttctgc gtatagcagc taaaaatggg gatgggatgc 180
 accttctttg gtgcttatca agaaaactca tcatggttgc acaacaggat ggagccaaag 240
 gaaaatcaac cgccaggttt gatttgcac actacttgct gctgaaaagc tcatccttga 300
 tggcaaatgg attctgagga ttctggttgt tt 332

<210> 9852
 <211> 460
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-012-Q1-E1-A2
 <400> 9852

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 ccctgccac attgagctga tcttgtcaga gaaggaagag cctgtgaaga aggaggctga 180
 taacgtcgtc gcaccaagga aagctatcta agccaccgga atggatgcat tcgtccaaca 240
 gtcttagttg tagttcttct caagtacctt tggtggcagt gtttgttgcc tccttgatgt 300
 ttttgttacc aacattgagt aaggatttgt taaggttgat gctatccttg tgattgcgag 360
 tggcttttat atgctaaaac agtttcagat atttgagcat tagcacacca gaacttattt 420
 ctctaaaaaa gaatgtcggt aaagaagaaa aaagcgggcg 460

<210> 9853
 <211> 477
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-012-Q1-E1-A3
 <400> 9853

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 ggaggctgag aagattgtcc agatcaagcg tgccgagggg gaagcagagg ccaagtacct 180
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cctgggcttc tcagtcaatg tgcctggcac cactgcaaag gacgtgatgg acatggtgct 300
gatcaccag tactttgaca ctatgaaaga ggttggcgcg tcctccaagt cctcggcggt 360
gttcatcccc catggccctg gcgcggtgcg cgacatcgcc acgcagatcc ggcacggtct 420
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<210> 9854

<211> 482

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-A4

<400> 9854

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caaggacatc ggcgcttagc aatcactaaa ccaacttcga gaggttattg accatgccgg 120
agcacgatca acctgaccac gaagggtctat ttcctgcaag caaacgaaga acaagcaaga 180
aactaagatg gcaatctgga tattgccaat ataagaggaa agctttatta atgaagggtg 240
ggttctgtga cgcctttgtc tggtcgttga acacaaacga agtacacgaa gttgcagcta 300
tggcgaactt tttatctaaa caaatcccaa agtctaaacg acgccctaag ggttgtatat 360
atggaggaag aggggggaat ttcgtggccc ttggggaagg ggtccgaaac caaccctatc 420
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at 482

<210> 9855

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-A7

<400> 9855

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atcacccctc tcctgtaccg gacggaaaga ggtgcgggtc cggaggccta ctgtcccgac 180
ctgtggtgca cgccgcaagc cgggatgcga aagatcgtag cagcagcgca gtgctcagga 240

accggtggcg agaggaggag gtagttctgg tgcgtctctc tgagaggagc gacctccctt 300
 ttataggcgc aagacaagga ggcgagaggc tgcgccggga gccaaggaa acacgggaga 360
 agagtgacct ttcatagacc cgtagtgcgt tgaagaaatt tagacatcgg ttcgttccca 420
 caggcaagcg gcggaagacg aacgcgccgt gg 452

<210> 9856
 <211> 167
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-012-Q1-E1-B3
 <400> 9856

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 ttttcaaata cataggaata ctctcaatcc atcggatatc cacgccgcag ccgaacttgg 120
 ctgtctcctg tggggggcat caacagatcc ctcacagggtg tctttcc 167

<210> 9857
 <211> 471
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-012-Q1-E1-C3
 <400> 9857

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 gtcttggaat tttgatataa cttttattgt gtttgagatg ttttgtcttt cgggagaact 120
 ttttatcatt ttcaaaacaa aacaaaagaa cagacttgaa aatttcttgt aaaaaatagc 180
 cacttcacat gaaacttgca tggccttctg gcacatatgt gaccatttca ttccagttga 240
 gcttatgggc taggggaggg aacagagagc tcttattgga tgcccccggtg cgtaacgcta 300
 gatagcaaca aatccatatt ataagtgtcg tgccttgata agagccctgt atggacaatg 360
 gacatttttg taatatatgc tgaccaattt ttaactacac actgaatatt tttgtgatat 420
 gcaatgaata atatttaaata acacattgaa catctctgtg atatacgctg a 471

<210> 9858
 <211> 417
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-D4

<400> 9858

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tggtatctca aggatccgcc tgccagtgag aaacccgcat gtttgcacgc gcgatagcac 180
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aacgtcaact agccgcagtg aacggggaac gcgggaatgt ttgtccgctt cataatgcc a 300
gctacactga ccgtaaacgc gacatcatga ctcatcagc cagtcacgca gattgatttc 360
ccggacaatt tcattgtgca gtactaaacg ccaactgact tttatgacac aatataa 417

<210> 9859

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-D5

<400> 9859

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cgttggattc ctctgcttt aaaaaaacac ctataatttt attcatgctc gtaacaatta 120
caggtacatt gatttgcac taaaatcgaa gaagacataa agtaattcct ctgactaaga 180
attataacga agacttgaa acagcttctg ctagaaaaat atatttcaa gagttccgta 240
aataggctgc aattgactgg agcaacgatg ttgtcactca ttcacatgct atagtaccag 300
ccaagttttt ttacaaccg gtttgtaaca ttgaggtctg ctacattacg tgtggttggt 360
gatctggtgc tttggtcttt tggggactta gcacgatgat tctccgattg tctaatagaa 420
taagttgtcc ccggctccgg caaaggaag 449

<210> 9860

<211> 467

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-012-Q1-E1-E4

<400> 9860

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agtgtctgta ctcagactag ttgcttcgcg ttgtgcttgt atgattgtat ggcttgagtg 180
tcgggtcttg tgaccctat ctgtatgaac atgttatgta tggctctctg gagcctttaa 240
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catagttgtt tacccttggc agcctttctt atggggaaat gtagtctagt gttcctcgag 360
ccatagtagt ccgctacaac ccggttcacc ggagtcctgc ttgcctagca ctactgctaa 420
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<210> 9861

<211> 485

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-F1

<400> 9861

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acgttgcat tatagttctt gctttgttaa atctgagatt gatgaaaatg gtatatagaa 180
tgcaaaaaaa attgtagcca cataatgatg ttgtatggta ccccgagcaa gtaatatgct 240
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tatgcgagtc cggcagggcg gtggcgatcc tttgcaagca cgaatggagc gaagacttgc 360
tgtgggctga gctgctgtct ggtcaaggaa gaaagttgat gtctttactg gcgaaacaaa 420
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tgtga 485

<210> 9862

<211> 479

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-F2

<400> 9862

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aattcacaat tgacattttt cttatatattg tgcaacatct ttttgataga tgttgaacat 180
ttttgaaaca ctatttcctc ctccaagatt cttgctttcc ttctacaggc tcacgtatga 240
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gccaaagtag acgtacaagc gaaacattcc acttatcgaa gaaggtaggt atttcaagtt 360
caagaagtag gcatcgatcc caagaatgt agtgaaaatc tagactagga ggaatgcac 420
aaagccaagg tcaagcaaaa ggttggttga tcgttacgtt ggtcggaagt tatttcctt 479

<210> 9863

<211> 481

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-F3

<400> 9863

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accaccgttg gggctgatcg atccgtccaa atccaaaacg ctagecggaca gcgctaccgt 180
ccaccgccgc agatcaaatac tgtgctagga aaatgcctgc cccatctatg tgggtcggtc 240
gccggggcgtg gctgacagcc ccaccaataa tgcattccga acttgattag actgcacaac 300
gagtgagcag atactctcca aattcttgaa tttcagggag ctggtggatt gccaaacaac 360
ccctgagatt caagctatct aatcaagctc tctctgttaa acaagtctgg cggatcatca 420
cgggtcccgaa ctcgctatgt gctagagctc taaaggcacg gcatttcccc ggaaaagata 480
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<210> 9864

<211> 470

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-012-Q1-E1-F4

<400> 9864

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aatatccacc ctttactctt tcgtaagtac gatggagttc ccgaagaaag gatgctgact 120
tcatcatgat gacctgaaac agagaaatga agacatcaac gtaatggatc gacctcttta 180
agaagggcaa ccaagactga gaagacctgt tagaatttcg taacaaaatc ccttccccctt 240
actccccctc taaatctcgg gacgagattt cttgtagtgg aggagaattg tgacgcccta 300
ataattaagc tacagtaaac ctttggttaat gatgccacgt cacctcgggtt acagttgcta 360
atctcacgtt agttcaaagt ttgactcata ttcaaatttg aattatagcc aaacagtaaa 420
ggttttcaaa tattaataact aaaatgttcg gggtgtgcc aataatgcat 470

<210> 9865

<211> 456

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-G2

<400> 9865

acgcctgcag gtaccgggtcg caaattcccg ggacgacatg aagatggaac atgatgcaca 60
gttgctcttg gccaggacca gggcgctgac tgggcaaagg agacgaggaa ctctcaaga 120
attaattggt catcgcttag tctccatgtc aacagcatgg cgcttcctcg aaggaaacgt 180
caccgatga atgatctgct ttggtgactt ttggtcgaag acgtgagata gaattataga 240
aatagaatgg atgttttcac aggcaaaggc atggcactca gtcgatacgg tatggatgca 300
acattttctt tttgagaatt tagtagagta gattattatt ttcttgatta taaaaatat 360
taggttggtt tgtctcggtg gacgctgatg tggaaaaact gaattactac actgccaac 420
gagaaggaag tgggtgaata taccggcgaa cgggacg 456

<210> 9866

<211> 475

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-012-Q1-E1-G3

<400> 9866

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gtattcacat ctagcagcat ggcagcagac cagttttttt tcttttcctg catgtgtttt 120
tcttttcttt tttattttct ttagtatgga tctatctctc tgatcaagca agaagagatc 180
ggcagctcca gcgacatgac gagccgtttc cgggttttta tgaagggaac tatttgggggt 240
cgcgcggaag caaaactagc tagggtttat tagtgctgct ctagttccgc ttgctattcc 300
tttcgcttgt tcgtttgttt cttaaggat tttattatca aggttgtaag gctggggatg 360
tgcagctagc ttcagattca agcctgccgt ctgcctgct tgtacattgt aaaacagaac 420
cgctgctctc cagtgactga atgattataa gcagctactg tantgggtatt tgggg 475

<210> 9867

<211> 461

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-G4

<400> 9867

actcgtggga cgacgtcata cactatagtg agtcgtatta agaagattcg ttaggatttc 60
gtaaccaa at cccttcccc ttactccgc tcctaaatct cgggacgaga tttctttag 120
tggaggagaa ttgtgacgcc cgggtaatta agctacattg accctctgct aatgacgcca 180
cgtcacctcg tttatagttg ctaatctcga gttagttcga aaccaattca aattcaaatt 240
aagaaaaata ggcaacaat aaaagctttc aaatattaaa actaaaatgt tcggagtga 300
ccaaatattg catagataat tatgggggaa aaaccacaca tgcataaaat gtttaataa 360
tatgagatgg gtaaaacagc agcaaaacaa ttatttttaa tgttttttaa tactaaacaa 420
atgttaatct agtttatata atcaccaaac ttttttagagt a 461

<210> 9868

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-G6

<400> 9868

cgccctgccag taccgggtcca gcattcccgg gtcgacatgt gtcacggaat gcactctctc 60
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gctgacgaca acatgcttgg catctgcttt gatgtctgtg atgtcgttct gtaaattgat 180
tctaatacaga tgggtggcgg ttaggtcatc ccaacagtca tcacggacat ttatccttct 240
cagctcactg ctaagcccac gttgctgcat cctgtatacc tgctgatat acaagcacca 300
gataatgcac ttggcggtag ctaagggtgt cttaatcata agataagagc acatgtttga 360
cgacatgcat atagctgtta ccccgctgta caacatcgac gcttacctcc cgggtca 416

<210> 9869

<211> 473

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-H2

<400> 9869

cgccctgccg taccgggtccg aaattcacgg gacgactctt aggcgatgct cagccagtca 60
cctgggaaca cctggcatgc cagcgggctt ccatgcaaaa atgtcccagt tctcacggag 120
gaactggatg agcgttctt cctatcttgg gtcgagtgtc acagccccag atcagccctt 180
gtttgttttt gcttttagcat ccatgcaaca tgtttaaatt ttatgaaatt tgaaatgggg 240
attgctcaaa ccctagcatt aaaggaattc actaggttca cctaaaatac tttcaagtaa 300
gtccaaatgg ctttcaaaaa tgttcatgat ttttgacaaa ggtgaaaaac ctctaccaa 360
aatgatgcca atatttttgg gccattatgg atttttgaat aatccatatt gtatttgtat 420
tggggcatth aaatactatt aatattttta aatgctccaa cagttctgaa aat 473

<210> 9870

<211> 450

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-H4

<400> 9870

gggacgacga ccaactggtca actgatccat aagcttggag gcattgacaa gcgtgtgatc 60
gagaggttcg agaaggaagc cgctgaaatg aacaagaggt ctttcaagta cgctgggtg 120

cttgacaagc tcaaggccga gcgtagagagg ggtatcacca tcgatattgc cctctggaag 180
 ttcgagacca ccaagtacta ctgcaccgtc attgatgccc ctggtcaccg tgacttcac 240
 aagaacatga tcaccggtac ctcccaggct gactgtgctg ttctcatcat cgactccacc 300
 actggtgggtt ttgaggctgg tatctccaag gatggccaga cacgtgagca cgctctcctt 360
 gctttcactc ttggagtga gacagatgac tgctgctgca acaagatgga cgccgccact 420
 cccaagtact caaaggcgcg ttacgaagaa 450

<210> 9871

<211> 462

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-H8

<400> 9871

cgctgccag taccggtcca gcattcccgg gtgcacacag gaggttttag tattccctgc 60
 atgattacca taacagatat atttcaagca atgaacataa tcaccactca ccatacctca 120
 tcatgccata ccggacacaa ccatctcgac ggaggactag agacaagccc gtgtctaccc 180
 aagacagagg ctttcccga ttccttccgg tatgcatgaa aggcatacga tggtgattac 240
 tatcccaacg tatcaaattc caatagcacg gaatcatcaa tatgactta tgagtatgtt 300
 catatcatcg cataaaataa tggaaactcc gagacgatgg gtgttgtaac cgtatcaaac 360
 aacacacgac aatattatgc cagggttcag aatgcttgcc ttcaagttgt ggagaggcaa 420
 ggtgcattcc agaacttttg aaagttttct cctctcccca aa 462

<210> 9872

<211> 379

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-A7

<400> 9872

gtcgacaggg ctgctcaagc ggcagagcag tccagcagcc gcagcggacg actgaacgtg 60
 tcgcacccca ccgcaccata caactataat aattcttcca cttcatgagc cattggacta 120
 ctgggaaata tgtttagata ataagcaagc ctttagatga gaaggcagat cataatagct 180

gagcaatagt atcttttttt ttcctttcaa actagcacct tttgtaaccc cacaacccat 240
 agcattgagc aagcacaacc aatcattggt tgctctatct gattattact aacccaaata 300
 ctagctatag taatgatggc taatggtgca tctccagatt tcttcaaaat agctctcgct 360
 acttacgcca tttttcatg 379

<210> 9873
 <211> 467
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-013-Q1-E1-A8
 <400> 9873

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 cacatgtgtt tatcaatctt ttagttgtga ccaaactctt cgtcctcact tggattgttg 120
 ccaacctctt agcatgtcgg tggctcctac caattatagt ttatttgtgt agggaaaatt 180
 ggccaactct tggagtacat aaaacattga tccaaatctt ggctacccaa aattttggtg 240
 gtgcaacctt gggctcaaata caaacgcacc ttgaattctt cacgcaaccc aggtgggacc 300
 tttgggaccg cttggatttg atcaccggat gcaagacaag atgaatacca ccggaatcta 360
 atatagagtg gctgagtggg ttttttatgt agactacang cattgagtgc tcacgctcta 420
 tgatttcagt ggatataaca acanaaattg aagtagacga tgcaact 467

<210> 9874
 <211> 436
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-013-Q1-E1-B7
 <400> 9874

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 acacgcattg acgcattatt cgcttaaccc ataactcttc agcaggctat cgtcactatg 120
 gggcacgaca tgcacttaca ctgcgccctt ttgtggcgat tgttgactct atacgttaag 180
 tttgcaccgg ggattaacat agcacgtgta gataatgata ttgacgaatt tgattgcaag 240

atatagaaca tctcccccg aagatgtgca tactgacgaa ttgctttta attcatggca 300
tacttgaaga cttcaatcat ggtcattacc ttctatatct tgtgattcat acacgcattt 360
aacatatgat atgacgaatt tgaaatgcat gattgacata tggtgactga tgtaattcag 420
catacgtgca taacca 436

<210> 9875
<211> 384
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-013-Q1-E1-C10
<400> 9875

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ttgacagtgc caggatcgag atcgccctgt ggttcctga aggcattgcc gagtggatga 120
gcggacagca caactggatc tattatgccg agcatgtgtc atgagtgtt gagtgcaggt 180
ttcattaagc atctaccaac ctagccttg gttgtttaca gttttgagat atgtatcttg 240
ggaaccatgt ttgtgtgcac tgaagttatc tccttgtgca tgggcaccca agcggtagct 300
gctgctctat atttgataca tgggtactgt ttgcctaca ctgcacggaa aacattgcat 360
gcagcggccg ctctaaagga tcca 384

<210> 9876
<211> 446
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-013-Q1-E1-D12
<400> 9876

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acgcaggggc ctggagccat cgcaacagaa acctagaaaa ggttaaaaat aaagagaggc 120
tagagaaagg agaggagttg cggctagagg agaaatgaac tgcaaaggaa gggtagaagt 180
tggcctaaat ttataggagg gaatgccaaa aggtcaaaac tgaaaattaa agaggagtta 240
atgaaaatta cgttaccaag aatgaaggac aatcaataaa agtttatgtt accaaaacaa 300
aaaagtctta ccaggaagtt ctacaacgac ttgactgca caaattcatg acgaatttgt 360

acacctgaag cacaagacca tgacgaatgc agtgcataga cgcaacaaag tagtgcatac 420
ccctaccaat gcagtgcaca aaaatg 446

<210> 9877
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-D9

<400> 9877

taccggtccg tagattcacg ggtgcacatt tgtgaagacg atctcaaacc ctgtggcagg 60
aggcaagaac gcctggtttg cgaagtttta ggaggcttgc aggaaggatg tcgagcgggc 120
atttggtgtg ctccaatctc gatttgctgt tgttcggtac cccgctcaga cctgggtccaa 180
agatcaaatg tgggagatta tgacttgctg tgtcgtcttg cacaacatga tcatcgagag 240
cgagcaaaaa gaccagtggt ttgacactga accatactac aggcagggtc ctctagccga 300
agttgatcac cagctaccgg caacttggac tgcctatctc agtatgcgtc aggagatccg 360
agaccacag gtgcatcatc aactgcagaa agatctgatt gagcacctat ggaggctcaa 420
gggggacgcc gtgtgaatga at 442

<210> 9878
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-F8

<400> 9878

cgacggcggc aaggaacatc tccggtgctc cgccccgtcc caatcgatct tccaggcagg 60
ctcagcctcc aagcgccctc cgacgccgca ctgcacctca tcgaccagga ccctggctgc 120
gggcgtcacg gtctctctct ccctgggtggc cgcggaacgcc aactcgtgca tctgcccagg 180
aatccatgag gcaccacctg gccgtctctg tggcggatta cgacagattt gcgaccaagc 240
tcaagacccc cggcacagac ttgttcgcca agacgcaacc cgatggccgc gcgcgccaag 300
tggtcttctc cgaccgggac gcatttgtaa tggagtgggtg ttccatgatg taagggcgtg 360
ctctgataga aacatgacat gacagtagaa gtagatttga caactggatg cccaaggctt 420

aaataggaac tgagatga

438

<210> 9879

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-H1

<400> 9879

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ataacatgat gtagagggat aaactcaagc aacatgatat aaaccccata tttttatcct 120

cgatggcaac aatacaatac gtgccttgct gcccctgctg tctactgggaa aggacaccgc 180

aagattgaac ccaaagctaa gcacttatcc cattgcaaga aagatcaatc tagtaggcca 240

aactgaacca ataattcgaa gagacttgca aagatatcaa atcatgcata taagaattca 300

gagaagaaca gatattattc atagataaac tttatcataa acccacaatt catccgattt 360

cgacaaaacac accac 375

<210> 9880

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-H10

<400> 9880

taccggtccg agattcacgg gtccacggtt tcttgattag cgaggcgatg cgcgacgagc 60

gcggcctgga ggtgcacatt cttcgtcgtg acctccggca cctgcagggc cactagggct 120

tgaaagagtt cgtcaccatg gaggccgatc aggggtggcag gcaatgagga gcctgggctg 180

gcgggctgga gcagtatggc aaggtcatct gcgcgcttct tgacgtcggg gaacttgctg 240

atggagtgga ccatcatgtc gtccatgcga gaggcgaagc cggcggttggc gagggctacg 300

acgccggcgg tcgccagcac cttttgaaa cgctgcatgg tgtggggccg caggccggcg 360

tcttgatta tctggcacag ccgactgccg ctcacgtcca tcgccccaa aggtgc 416

<210> 9881

<211> 358

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-014-Q1-E1-A10

<400> 9881

ctcgttgtac ctcgcaacac cctatagtga gtcgtattac tgatccctct gactaactgc 60
atTTTTgagc aacattttca cctctctgta gcgagagacg gccactcca cttacgccgg 120
tggcacgggc agtttgccgt tctgtgtact gtctctggat caattctaaa ttccaccgaa 180
gacatacact cgttctgccg agtctgaccc ctgccatcac aactcatcgt acatccgact 240
tgtgtaagca atataagtat cgctgcttaa cttcaatgcc cgaagcaacc gttcatatct 300
acaccgtgta gaaatttcac gggtgcaatt tgtgcctctt cgagttactg tctctggt 358

<210> 9882

<211> 296

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-014-Q1-E1-D11

<400> 9882

tatcggacct gaattcgcgg gtcgaccctc ggcaggatag ttggaaccaa atgccacggt 60
cataccctaa tatctttaac actaatcga gcattgccgc acataaagta ttaacagtac 120
caataccagt cagagttaaa atcattttac acctgaccat attgtgcgtc tggtagacca 180
tctttagtaa gaacagctcc cactccttct cttgcagcac gtccctcaat tagtactggt 240
acaacaacca cttggacgcc tgctgcatca agttcttggt ggtgatcagt accata 296

<210> 9883

<211> 465

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-014-Q1-E1-E10

<400> 9883

taccggtacc gtaaattccc gggtcgaccg gcaccactcg gatgtccgac agctgtgcag 60
atttcctcgt cattcctcag tagtcatccc atctctcgga cgtccaggat tcttcaatcg 120
tccattacct gactcatctg gtgcactcat cagctcccgg acgtccagca tctgtcggtc 180

atcaggtaaa atccacgacc catataaaac agggaagggg attgaccggg ctgttaccct 240
 aaactttccc ctctgaccca tccctttcct ctgtccgctg ccgcaccgct gtcgtggagc 300
 ctctgtgtcg gtggagtctg gcgctaccgg acagatgctc tgccgatcct ccttcacctt 360
 gatctggctc ggtgtggcta accaaaccac gtcgacattc aagcatgccg ctcacaaaag 420
 tatcgacggc tcatcggtc acgcgtctca ttgcgggtggc tcgga 465

<210> 9884
 <211> 448
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-014-Q1-E1-E11

<400> 9884

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 gccaaaggaag tctgcgctg cttctcctc cagttccagt tcgcggaaca aaagcttccg 120
 gtgtgtcttc gagttacggc gagtctgaat ctctcgtttc ctgagaagac actccaagtc 180
 ctggatgtac gagagagtgg aatcgctctc aatggtagcg atgatattc cattccttgc 240
 cctgcgagaa accatggcga ggtctgagtg atcgagctcg gccctgtact cctctcggag 300
 atgtccaagt gctcgataga tcgccacgct ccttccgatg atccagttga actcggtgaa 360
 ctcaaagttg ataggctccg tgtgtcctcc aaagggtctc cctgggatat gcacttcaat 420
 cctgtancgg gtgtccgctg gaagtgca 448

<210> 9885
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-014-Q1-E1-E12

<400> 9885

gtaccggacc gaaattcccg ggtcgacttc tgctattctc cctcgtcatg tttgagatag 60
 cgccagccag aacagggaca tgactggatt attttgctc agcaggtcct aaactcttca 120
 ttctgaaaca gtgcaagatc aactgcatct tatctgatag tagcagggtta cggaaatata 180
 tacatggaat tgacctgaaa ctttccagga cagtgtacgg tgggtccttg ggtgtctcta 240

ccatgttcct agtcaatagt tgcaaagatc gtgtggaagc tagagaagat ctcgaagctc 300
 gtcgatcagc cccacacag gaggcagcgg ggctttttcc cttctcccat aggacgaaaa 360
 gcggttcttc ttctctgaaa aagagagaca aacctaggcc ctgaaggatc gcatcccgat 420
 ctagccttgt cgctccgcg 440

<210> 9886
 <211> 435
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-014-Q1-E1-F11
 <400> 9886

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 aatttgatat aggaaaagtt tcttaaaagc atgcaaaaat atcatagaat ggtgatcttt 120
 ttttttaaaa ccctccgttc tagtcatttt caatcatggc agtacaacag acaccataaa 180
 tacgtattac atccagatcc gtagaccatc tagcgacgat tacaagcact gaagcgagcc 240
 gaaggcgcg cgtcgctatc gccctccat cgccggagtc gggcacaatt tgtagtcctg 300
 gacagttggg aagtcgctgt gttacgacac catagagaca gcgcattaca agagcatctg 360
 ccgccgatga gcaatggcag gccgatctac ctcgaagaca cattcagctc gacgagacac 420
 gaccatcaga gctac 435

<210> 9887
 <211> 196
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-014-Q1-E1-F12
 <400> 9887

ccacgcgtcc gaaagaagtt agtcgccttt gctgtcactc agagatcggt atcattacca 60
 tctattcgtg attccataga tacgccttcg cagactgtac tgggtgtgatt ccatcgtgca 120
 catggcagac cattttctag gctgcaattt cagcaacctc agcagaattg aatcaaattc 180
 attctttata atggct 196

<210> 9888
 <211> 379
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-014-Q1-E1-H11

<400> 9888

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 gacaccacac tctcaggttg gatactgcga tatcaaagtt cttcatcatt atgactcaat 120
 tcgggtcctg tatactatat ttcatccaa tccagattct tccataaagg ttcgtacatt 180
 ctaccatac tgacctctgc cgtagccact cactcatatc cgtttgcttc actcactcta 240
 cgtctctctc gataccgtca attcccagat caaagggtcc tacttacagc tgggtgaaaa 300
 ttcccgggct caatttgtca ctcttccagt ttctctccct ctgcagtctg cactgcctgc 360
 aactgacttt attgctcac 379

<210> 9889
 <211> 471
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-A1

<400> 9889

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 ctcatcgaaa gacgggacac cttagcctct atcaagtggc atcagatttc caggttgctc 120
 ggtgagattt tacagttttt cgtagtttag atcgagtctg ttcttcatac ctacagtcca 180
 cgaaaaagcc acaaaacaaa attaggggta gttcatcata tccgaaccaa tctgagcctt 240
 tgcataatct ttctaggggt ttgctttggt gaatttgagg ttgcatcgtc gtgtgtagtt 300
 gctggtctta gagtctagtc ttttagagtt tcgagttctg gtcataagtt gtcacgccgc 360
 cgccgcacca tcatcatcgc cctgcccac taccaccacc gcttatccgc caccgctccg 420
 aatccgtatc catataccac caccgattca tataccacca ccgattcata t 471

<210> 9890
 <211> 446
 <212> DNA

<223> Clone ID: LIB31-015-Q1-E1-B3

<400> 9892

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tcacggtgca cctgtacgta gtgtactccg cctcagatgt tcagctgctc tctgggtaca 120
ccacaggcgg ccatacccgg cgatgggtact cgggaggata gcaccatcca atcccgccga 180
ggtgtgggag aggtgctgcg ccggcatcaa agttaagcct attaataaag aaaagatatt 240
tatatttctc gtatttggat gtgcctctat catgtggcgc ctgctaccat tttttaaaact 300
tgtgggcgcc tgctaccaac gggcgatgct atgtatcgct ctaagcgagc aagatacaaa 360
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<210> 9893

<211> 422

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-B5

<400> 9893

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tggtcgggtt ccagtgggca tcgaaagaag gtgctttggc tgaggagaac atgcgtggca 120
tctgctttga ggtcggatgat gttgttctgc aactgatgc tattcacagg ggtggtggcc 180
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atggtgttct gaatcagaag agagggcacg tgtttgagga gatgcagagg cctggtaccc 360
cgctgtacaa catcaaggct tacctcccgg tcatcgagtc gttcgggttc tcaagtaccc 420
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<210> 9894

<211> 353

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-B6

<400> 9894

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 cgccttgtag gcgcccgtgc ggaggagtgc tgggtgctgca cgctgaaca cgccgccaca 180
 cagattggat ctgactcctg cgcgtccatc gattcggcct agaagaagtt cgccaaaaac 240
 acgtcacatg tatcggtgc ctctcgatcc ataatccaac tccaagtcgc ttctccctca 300
 agaagaaaag gagagaaaga caagaaagcg gccgctctag aggatccaag ctt 353

<210> 9895
 <211> 453
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-B8

<400> 9895

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 tcaaaggcgt tgcaaaaggt tgatcctctg gtgccatcca aggtgatccg tagagatgct 120
 cctccacaga gtttgccggt gttgcagaag gaaacaataa aagttgcttc ttcccaccag 180
 ccagacaggc agccgcagcc tgttctgcac aaaccaaagg tgctgtagt ctctcccctc 240
 atcaaacagc agcagtcaag caccttgccg aaagaagagc cttgttcttc tggcaggaac 300
 actgaaaaag gctcagtacc agaggttaag cagtcaaagt ctgatcgtaa gaagagccgc 360
 aaggctgaga aggaagagaa taaagagagg aagttccgag atctatttgt tacctggaat 420
 ccaccttcct tggagattga agagacctgg aat 453

<210> 9896
 <211> 439
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-C5

<400> 9896

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 gggaccggca agtcgcgagt tcttacctcg aaggcgctcat cctggcaaac caagataagg 120
 ataacttcct cgtgccttac tttcccgagt aagtcctccc ctcaaccggc ccgtaacata 180

tgaattctta catttcgatac gtttttcttt taacattccg tgttttctgc agtgacacac 240
gttgacgct catcctccta agccccaat attccatggc cacgtatttc caccggacc 300
gtcagtcgaa cgtagactac acaaatgtca agaaggttct tgatgatgtt ctccccggct 360
acgccaaatc tggaggcacc ttcaccaggc ctattcgtaa gtacggcaag cacgtgttct 420
cccacaatac gatgttctg 439

<210> 9897
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-C6

<400> 9897

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tcggtgcgga gggagtcggc ccagccggag gtggtacgtc gccgtgtcag ggaggaggac 120
gagcacgtcc atcgatacat ggttgcgta gaggggtggca ggttctccaa taccggcag 180
tttcttcagg gatctcactt caactatgat cctgtgaggg ttccttctct ttgggtgtcc 240
accgccgcgc cgcaggaacc gcgagtgtcc tagattcttc tgtagtattc gatctttatt 300
agctacctag ccagtgatgt attcgatatt atatctatta ttcgagatga tgtattcgag 360
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tttgagatta tatctattat tcgagacga 449

<210> 9898
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-C8

<400> 9898

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ccgagcccga ccccaaatcc gtcgagcccc gtgaagtgcc accccaatcg gggttcctct 120
tcttgggcca caatgttgtc tggatcacc tcccaggcac catgggcgtc ttaaggtccg 180
cgaggatcac tctgccgcac atggccgcta gtacctcacc atagtcgttg tggggtagga 240

acctcgattg aattggtaaa tgggcagagt ttttaatgaa gcggtggagc gggctctgtag 300
 gttttaggtg tgagacaagg gcagtcacct atatacacgg tggtcgtgtg acggcgcccc 360
 cacccaaggt tccatgcac agtgaggggt cgtgcggcgc agaaggaacg aggtagggtc 420
 cggaagcaag tgcttccatt catgggga 448

<210> 9899

<211> 451

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-015-Q1-E1-D5

<400> 9899

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 ttccgaactt ggagaggtga tacagccgga actctcttca gagaagattt tgaagctaac 180
 tggatgatag ggtcagagat gatacccttg aaggattcag caagcatgac ccagctgccg 240
 tcgcgttggc cagctaagat ggtgttgact ctgatgtgga caacgggtca cgcgtgatgt 300
 atgtggccgg agaggttgat tccggtggag tagagggagt tgagcaaagt actgtgtttg 360
 ctctgctcnc gttgtgcaag atgggcacac catcttcaac agtttgttgt ggtgtgctgt 420
 cgggtgtgctt gaggttccag acaaaaagaa a 451

<210> 9900

<211> 450

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-D6

<400> 9900

ggtccagaat tcccgggtcg acctcaggtat tatattcgta atggtaggcc tgcaccacca 60
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 ctaccttgga tatgacaaaa aatattgcat atatgcatat ttgtcaggtg atttctagt 180
 caaactattc aataatgtat ttatgttatc cagaacaaaa atacttcaca cacttttgtg 240
 ttttgtctaa ttgcaggtgt atgggacatt tgtacaatcc acatatgaag ataaggaaga 300

aagagatgtt tatttgctgt ccaaaaagtt ctctcacgtc acttttggcc caagagaaga 360
tagagtccaa gtctctcacg ttctggattc atattcggac tgcacagaca tacctgactc 420
aaaacgcaca caagtttttc atacggactc 450

<210> 9901
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-D8

<400> 9901

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gttcccccttt gagaggttca tgggagtcct aaaaaaatat gtccgtaacc acgctaggcc 120
agaaggaagc atctccatgg gccatcaaac agaggatgtc attgggtttt gtgttgactt 180
cattcctggc cttaagaaga taggtctccc taaatcgcag tatgagggga gactgactgg 240
aaaaggcacg ctggggagggg cctcaataat atgcagggac ggatattctt ggtctcaagc 300
acactacaca gttctataga actctacctt ggtgaccccg tatgtcgatg aacacaagaa 360
cagtttgcg cccaaacacc cggagcagtg cgacgactag attacatgtg aacacatcag 420
gactttcaac agttggttgg aaacacgtct 450

<210> 9902
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-E4

<400> 9902

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gttcccagct gcctgcaaaa cctcgcgtca cttgtttcgc tggagatgtc tgagtgcccg 120
ggcataacat ccattccagg tgacatttgg aggacgaacc ttgcatctct agaggagtta 180
tatatcaccg attgtccaga cctggtctca attgggggat tggaggccgt tgcgcagcta 240
ggcacgctgc acatctctgg ctgccc aaag atgatagaga tgtagcagcc tgtgaagaga 300
ggcggagact agctaagatc ccatcacttt tcaagtctat ggatttttgt tgttgttgca 360

ctgagatctc tgtatctgtg tggatcactt gccaaactac tccagctctc tggccagctg 420
agctcatgcc tattcctaatt tc 442

<210> 9903
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-E6

<400> 9903

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atgcttattt cttagtcgag actcgttgct gaagttggag ctgattggtc cttggcgtgt 180
ttggccgatt gtttgggtatt agtcggcagg gtttttgtgc gttggacgtg catggtaaag 240
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gttacttggt tcatcaatgt ctgtggggtc ttatggatag gtaggtcaac tgcagtgcac 360
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gttctag 427

<210> 9904
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-E7

<400> 9904

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ggttcaagcc tccactccga cgaccaaacc acccgatcc cgcgtcatct tccactccgg 180
cgggtggctca actcaagttt gcagaacacc ggatctgccc agggcaaggc cctcgtccac 240
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gtcaattact tgtgcttttc tcctgggtga tcactctgtc cagatttgca cttctttttt 360
ggtgattttt agtttgttcc atctattcct ttgagaccgg tgatccaact gtatggctta 420

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433

<210> 9905

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-F1

<400> 9905

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ctaagagttg caaatatctg atgttcttta aaaaaggaag gcgacaacta ctcaaagcac 120
tcgtgctagc accaggaaag tctcaagcaa atgtttcttt tcctttgaaa tctaaaggat 180
atgaagccaa tactccgga tcttggtttc ctattcctga gggcaccaaa ggtacttttc 240
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aggtccttcc agtgtgcat aatacgtcaa tcccttaaca ctgagagaac atgcagcctc 360
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ggcgaacct 429

<210> 9906

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-F3

<400> 9906

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agaatgaaag taactactca caaatgataa acatgctcaa gatcagaggg gtattaaata 180
gcataatgga tctgaacata taatcctcca ccaaataaac catatagtaa tcaactacaa 240
gatgtaatca aactactag tcaccacagg gcaccaatct atagttttga taaaagatt 300
gaacgcaagc gatgaactag gggttgagag aagttggtgt tgtgaagatg ttgatgaata 360
taacctccc caagatggga gagttgttgg tgatgatgat gacgatgatt tccccctccg 420
aaaaggaaat tccccggcg 440

<210> 9907
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-F8

<400> 9907

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caacagttga tctgttgac catcgcaata tgtcaacaac tacacgttgt ggactctgtg 180
gagccgagga ctcatggcaa cattcgctat tacactgtac ggtagctagg tgtgtatggg 240
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gttggtgtgt tgcatccag gacatgctat ctctgaaga gttcatcttg gtagtcacca 360
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ctctatcaac ttacacttc atc 443
  
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<210> 9908
 <211> 468
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-015-Q1-E1-G1

<400> 9908

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tctttcgggc actcctgacc agataaacag agctgagcag ttgataattg atgttcttgc 180
agaggctgat gctggatcat ctggcactat ctctaategg aagtacaacg cacctcaacc 240
tggtgctgag caattccaaa tgcaaattgc taacaataag gtgggtctgg ttattggtaa 300
gggtggtgag actataaaat ccatgcaggc caaatctcaa gctcgtatac aggtcattcc 360
tttgcatctg cctcctggtg atacttcaac tgaaagaata ctgtatattg atggtactgc 420
agagcaaatt gagatagcag agcagcttgt gagtggagtc actagtga 468
  
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<210> 9909
 <211> 435
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-015-Q1-E1-G5

 <400> 9909

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 tataaataag cacgtaccac cacacattat gctagtcctg ctaatacgga aataattaga 420
 agaaggataa acgcg 435

<210> 9910
 <211> 449
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-015-Q1-E1-G6

 <400> 9910

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 aaaaatgcan anggggatgc aaggagcac 449

<210> 9911
 <211> 439
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-G7

<400> 9911

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 atttgaatca ccttactttc ttactcctag ttcaaacttc aaatataatt aaagtgaata 420
 ataaaagttt tcaaaaact 439

<210> 9912
 <211> 447
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-H2

<400> 9912

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 tggtgactct cagttagtga tcgaccaact actgggaatt tacatggtaa agaaagaaga 240
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 tcagcatatt ataagaagtc aaaacgaaaa ggccgacgcc ttagcagggt tagccgctag 360
 tttgtcacta acttcacatc agatgatgga cgttcgagtt gaagaatgta agatactacc 420
 tatactcacc gcaagagagg agacgac 447

<210> 9913
 <211> 405

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-015-Q1-E1-H7
 <400> 9913
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 aattgtcatg gtgacacatg cgcgtgcatc attctcacac aaacaaaaat cagtttgtct 300
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<210> 9914
 <211> 464
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-017-Q1-E1-B2
 <400> 9914
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 aactctgcct cgttaatgtc ggccaccaac gatgataagg ccaaaccgcc ccacatggcc 240
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<210> 9915
 <211> 404
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-017-Q1-E1-C1

<400> 9915

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atgatgagaa aactcgctat tactttattc tcaaattatt tcctttctca ttagagggtg 180
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tatttaactt tgtgcaaact agagaagaga gtctcccaca agcttggggg aggctttgca 360
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<210> 9916

<211> 426

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-017-Q1-E1-C6

<400> 9916

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tcaatccatg gcttgctcga aacaacgagt gcctccaact aacaacagtc ccaggggggg 180
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catggaagat acggatagcc ctatttgata catgagctat ttgagcatac aaaacagaat 360
ttcatttgaa ggtttagagt ttggcacata caaatttact tggaacggta ggtanatact 420
gcaaat 426

<210> 9917

<211> 420

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-C8

<400> 9917

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 cacggatgct tagaggccta ttggtgccct ctgaggagcc atattacgtg caagattaat 240
 cctcgctgtg cgccgaagac tgcgctaac tgaagtgtac attttctttt tctctcttct 300
 ttttcccttg tggtttgatg gtgcgtattc ttgtgtggcg cgagtccttt ttttcccacg 360
 gcttgccctg agtgaacagt catgctcttt ttcacctaca aaggtttggt tgctgctttg 420

<210> 9918

<211> 419

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-D1

<400> 9918

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 aagacaagga caacgcgact ctggaggacg tgcgtcaacc cgggactgac atgatcgccg 180
 ctggctaccg catgtacagg agctcatgca cgcttggtgt gagcaccggg aacgggtgta 240
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 taccaaaca agggaagatc tattcgggtc atgaagggaa cgccagaaac tgggacgcgc 360
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<210> 9919

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-D2

<400> 9919

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gagctaagtg caggggtccat ttttctgaag gaaacactgg attcagttaa aagaaaaagg 300
aaacactgga tttctccacc aaatggcaag cagaaaaaga tgtctagttt ggtaattttc 360
aacgccttac aagttactgt acttgattag ccagaaggaa tataatgttc tttt 414

<210> 9920

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-D3

<400> 9920

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aagccaagta cctgtctggc ctgtgtaacg cccgccagcg ccaggccatt gtggatggcc 180
tgacggacag cgtcctgtgc ttctcagtca atgtgcctgt caccactgca aaggacgtga 240
tggacatggc gctgatcacc cagtactttg aactatgaa agaggttggc gcgtcctcca 300
agtctcggc tgtgttcac cccaatggc cctggcgccg tgcccgagat tcccacgcca 360
gatccccgac ggtcttcttc agggccaatc tgctctgac aactaatcac tttgcttcgc 420
cggc 424

<210> 9921

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-D6

<400> 9921

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tcttgttaca gaaaaataaa gaagaagttt tacatcaagg gtcttgttgc agaaaaatag 180
agagaaaaag tttcgcaata ggtgtcttga tgcagtaa ataaagaagag aatattttgc 240
aatagaggtc ttgttgcaaa aaattggaga agaagagatt tttgtcacat ggctcttgtt 300

gcagaaagtt acacgagaag aggtttcaca acaggaacat tgctgcaaga aattacagaa 360
caagaatgga cggctcgcct cttacaatcg gacggctcac gaggcagcgg gtctttttaa 420
agattcttcg gccgacgcat agcactg 447

<210> 9922
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-D7

<400> 9922

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tcgtcgacag gatggttgca tgggtccaaa atatcaaggt gtcagaccg ctcgaggaag 180
gttcgaggct tgggccagtt gttagtgaag gacagtatga gaagatcaag aagttttag 240
cgaatgctaa aagtgaaggt gccaccattc tgactggggg tgtcaggccc aagcatctgg 300
agaaaggttt cctcattgaa ccacaaatca tcaactgacat caacacatca atggagattt 360
ggagggagga agtctttggt ccagtcctct gtgtgaagga attttctacc gaagaggaag 420
ccatcgaact ggccaatgat ac 442

<210> 9923
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-D8

<400> 9923

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ggatactgga ggcgaaagta aaagcggcta gccttgcaac ggctgctgag gtgcaacaac 180
cggcagcggc cgtcccgaca tgggtccgga ggctcttctc ctgaacactg tttagcaggc 240
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gccggtgtta ttctttttgg ctgtgtaaac actctgaaa ctagtttcgc gtagtgatta 360

ggttctcgtc tagtgtatgt attgttcaga cacttgactc gggtgtttta gaaagtgttc 420
tggtcgttga cagctttggc aaccccaggg 450

<210> 9924
<211> 450
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-017-Q1-E1-E3

<400> 9924

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gggactcgcg atgcaaaggg cgatctcccc ttcaattcta gcctcagggc ggctgaggat 180
cggaagaagg gtttttcttg tgagagctca tccaaggaac ggtatgaaac aaggcaaagc 240
acgaaggaat catggacacc aagctctcag cagaacaagg gagtcgaggt tacttcccca 300
gtgaagaacc cctcattgaa caagcgcaag ggtgggccgc aacaggttta ccgtanggtg 360
gaaccagccc cgctcgccat gacagaacat ggggaagtgc atgcgactac tgaagaagca 420
tcaggaaaaa gctcagctgc agattctgaa 450

<210> 9925
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-E5

<400> 9925

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ttttacgcac cgaggggtggg tctgcgatca ctccatagtg ttctgagggg gattcaattc 180
agcactagac agccaaaagg aagacacaat aagctggcca agctcatatg catgcacctc 240
tgccaactga accatctaata acctcaccgg agtatgtaat gctatctagg ctgatgaatg 300
aattatctgg tgcattatgg ttagcaacat ggcatgctgt tctgttttcc ctcatatgatc 360
cggctgtcca ttaacttgct tttaactgaa cttctatttg attgtcttag ctttaataac 420

ctctttt

427

<210> 9926
<211> 268
<212> DNA
<213> *Triticum aestivum*

<223> Clone ID: LIB31-017-Q1-E1-E7

<400> 9926

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tgcatacagaa gacgcgtcag aacattggtc gcatgaaagt tgccttctca atgatgggta 180
tgtcgaagac gtgtgtgtga acacgagtgc acgaatctct tccatttgca gtagacatct 240
tcgcatcaa gatcaccgcg aataacttg 268

<210> 9927
<211> 455
<212> DNA
<213> *Triticum aestivum*

<223> unsure at all n locations
<223> Clone ID: LIB31-017-Q1-E1-E8

<400> 9927

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cgtcctgcag aggagatgcc tggttctatg ggtgaccttc ttcttgagct ctcgcaactg 120
cttgatcaag tttggcaggt gatgcaaggc atcgcccagg cctgtgggcc atccgtctcc 180
atgccgaag gtcttggaga gcttgcatg aatctaaagg gagcacggcg gcgcttccga 240
ttgtggaaga tatcagcctg ccgtcaaggc gctagggagg cctgggcat ggtgaagacg 300
cggtacacaa aggctgaccc caaccacatg gccgaggtcg gtcctgtang gccgatggg 360
aaggagatcc ttgtaagggt agtatacggc caagtagagt tggccgcana gtattcctag 420
taggactgta aattagacag cctgttagat ggtat 455

<210> 9928
<211> 443
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-F4

<400> 9928

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cgcgtcacga gcctcttgtg ttatcaagtg ttccttgcac gaccactega gagcctccgt 180
tccttctcgg gccatcgagc gaggcccccc ttgatccctc tcagttgacc ttaccggccg 240
agatgatctt tcaagaggag gcaatgctaa agcatcgggt aagttcaact caggagacca 300
cctcgatgcc agatttggga gcggtacggc tgactcgggt ctgagggcgg aatcgaagta 360
acttcgcgat caaaatggac agatgacttg gaatttctgg aacatttgct cattggagtg 420
ctccatttag gcagacaggc aat 443

<210> 9929

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-F6

<400> 9929

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tatttttaag tgagtttaaa gactttttta aatactagca aaacgaccca tgcgtcgcaa 180
ctgaagaaaa aaaaatcata atctctaagt gtcatgacca cattttgctg catcaccgag 240
atacactatc actttcattt tcgtgaaatc gtgaacaatt tttgaaaatc atgaacattt 300
ttttaactga tgaacatata tgaaatcgtg aacattttcc aaatacttga acaattttta 360
aaaattgcaa actttgtcca aaatcataaa cgttttatga attcatgagc attttatact 420
atttgc 426

<210> 9930

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-F8

<400> 9930

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ccctgggtcgc cgccgtcacg gtctcctcct ccctgggtggc cgcggacgcc aactcgtgca 180
tctgcccagg aatccatgag gcaccacctg gccgtctctg tggcggatta cgacagattt 240
gcgaccaagc tcaagacccc cggcacagac ttgttcgcca agacgcaacc cgatggccgc 300
gcgcgccaag tgttcttcct cgaccgggac gcattttgtaa gggagtgggtg ttccatgatg 360
taagggcgtg ctctgataaa aacatgacat gacaatagag gtagatttga caactggatg 420
cccaggctta gataggaact gag 443

<210> 9931

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-H5

<400> 9931

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caggactcgc tgagtgatga gtgtttcagt catgtaacac acataattga gttgccaggc 180
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gtgtcagata cgtagtcatg atactgggtg tgggtgtgtag cgagttgcat ttctcacctt 360
tttcttgtgt ggtattgggt accgattcctt gctttatctt acttagctgt atatatttct 420
ccatttga 428

<210> 9932

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-H6

<400> 9932

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gtaaacaatga gacattaata cctgattagc ggcagcagca tcacgacat cgtcctcgtc 180
atcagcattg aagtcagcat catccttttc ctctggatta acacgagacc acttctttgc 240
agggtggaacc ttgcgcttca cgccgcattt cttcccccta ccagatgcac cagcaccaag 300
taaagaaggt gtagactcgg cagtggcaag cacacgagga ctacagcgtg gcgtaccacc 360
aaggcctaac ccttcatctt caacaacttc tgcaggcctt gaaatacgtg ggctctttcg 420
aggagttact tcaccaacta ct 442

<210> 9933

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-H7

<400> 9933

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acaacaagat caactgggca atgaaagaca agcaagagtt tggtgacatt gtggagactg 180
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tccgtgatat gcgctgtgtg acccttgatg taatgtctgt caactttgaa agtgtcgtaa 360
ctatgtattt gtatcttgaa tatcaacatg tcataaacct gcaacccttt aaaaca 416

<210> 9934

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-H8

<400> 9934

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 gctaagatcg agtctgttct tcatacctac agtccacgaa aaaagccaaa aaattagggt 180
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 tttcgagttc tgttcatagg ttgtcatgcc gctgccgcac catcgtcatc atcattgcc 360
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<210> 9935

<211> 405

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-017-Q1-E2-A1

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<210> 9936

<211> 460

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-A12

<400> 9936

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 gatacgcccta ctaagtggca tgcttggtg cccttggcag aattctggta caatacaaat 360
 tatcactcat ctctggagtg ctctcccttc aaggccctat atggatatga accaacttat 420
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<210> 9937
 <211> 162
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-A7

<400> 9937

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<210> 9938
 <211> 435
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-B10

<400> 9938

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 ccatcggtt cgtcgtcatg ggcttcgtcg ggttcttcgt caagttcatc ttcatcccca 180
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 gaatgacaag aattg 435

<210> 9939
 <211> 442
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-B8

<400> 9939

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<210> 9940
 <211> 460
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-C1

<400> 9940

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<210> 9941
 <211> 448

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-017-Q1-E2-C11
 <400> 9941

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<210> 9942
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-017-Q1-E2-C6
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<210> 9943
 <211> 452
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-017-Q1-E2-C8

<400> 9943

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tttcatttga aggttttagag tttggcacat acaaatttac ttggaacggg aggtagatac 420
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<210> 9944
<211> 464
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-017-Q1-E2-D1

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acccgggact gacatgatcg ccgctggcta ccgcatgtac aggagctcat gcacgcttgt 240
gttgagcacc gggaacggtg ttaatggctt cactcttgat ccttcccttg gggagttcat 300
acttaccat cccaacataa agatacaaaa caaagggaag atctattcgg tcaatgaagg 360
gaacgccaga aactgggacg cgcccacagc aaaccaacat tgcaggtacg tggagagatg 420
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<210> 9945
<211> 461
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-017-Q1-E2-D10

<400> 9945

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ctccctgttt catttctgta atcagataac aaccgtgccg tgccatggca ggcttcaaca 180
gtgttgagct ccaaggcacc atcgactact tgtcaatcac gccggcggcc cgcgctggat 240
gttaccatgt aatggatgaa gcaaattgcc actgatttag aaccagcgga ttggttcctg 300
gtacgccgct ggtttcagtg tctgaacctt atgatttaga aggtgtcaaa ccaaattgatg 360
tatccgctgg ttcattcaat tcagtgccga acccaatgat ataattgatg aagcaaacac 420
ccaccgattc atccattatg atgaacctcc aactacaaca g 461

<210> 9946

<211> 460

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-D12

<400> 9946

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ggagcggat ggggcctaac aagacgcttg gggttggcct cattgttctc tactcagttt 180
tccttttcat tagagtaagc agtgctatgg ggatattgcc actcccgggc ttgaattagt 240
tgtttggtgc tattgtacat gactgtcctg tatacagatg aaatgggggt gtacattgtt 300
cctttgttct gttgttatgc ctcaaatttg gttgtatgcc tgtcaggctt tcagagacaa 360
taaagccaga gcatgcctgc aactgggtcta cttatttgta caaaaaaat aaaaaattaa 420
gtaaacaaaa agcggccgct ctatatgatc caagcttacg 460

<210> 9947

<211> 470

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-D2

<400> 9947

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catgcatgtg tgctgctagc tcttgatgga tggtcactcg atttcagctg ccattgtgca 120
tcaccatctc ctggatgcct tgatatctgt gttgctttgt tgatctttgt gtagctcttg 180
acataatcgg ctactgttaa caacttgaac cagtaataat ctgcttgatg atagaaacct 240
tcttgttcct tcagaagaac agagctaagt gcaggggtcca tttttctgaa ggaaacactg 300
gattcagtta aaagaaaaag gaaacactgg atttctccac caaatggcaa gcagaaaaag 360
atgtctagtt tggtaatttt caacgcctta caagttactg tacttgatta gccagaagga 420
atataatggt cttttacagg tccagtgtgg ctcccttgatt caggggaagc 470

<210> 9948

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-D5

<400> 9948

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gtgatatgat cgatgattgg ttggatgctc ggataattga gcccaggaggaa catggagtgg 180
ttgccgagggc tgtaaaccgg cctccaattg aatacgctcg gccaaacaaa gctgggatct 240
ttctcgaaca cgaagcagcc agagccgtca atgtcacgaa cgcccgaggc attgtaccgc 300
atgtggtttg atgaaatggt ttggtcaatt tggtagctgc aaatgagcat caaatgacaa 360
ccgtcagctg aacgaacgat aaaccaccac ccatcggtcg gtatgattcc aggtcctaga 420
atcatgaagg ccagcgcatt tgcgtctgc 449

<210> 9949

<211> 457

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-D6

<400> 9949

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atcgcaacag gattttccgca gtccttccag aagtcccttc tggctgacct gaagggagca 120
cggatactgg aggcgaaagt aaaagcggct agccttgcaa cggctgctgc ggtgcaacaa 180
ccggcagcgg ccggtcccgac atgggtcccg aggctcttct cctgaacact gtttaacagg 240
caaacaacct tgcgattgtg aggtgtggt tcttactttc tcgaggcagt agatagtttt 300
agccggtgtt attctttttg gctgtgtaa cactctgaaa actactttcg cgtagtgtt 360
aagttctcgt ctagtgtatg tattgttcag acacttgact cggttgtttt agaaagtgtt 420
ctgttcgttg acagctttgg caaccccagg gctcgtc 457

<210> 9950

<211> 453

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-D7

<400> 9950

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ttggaccaac ggtcagattt gcagtgcgac atctcgtctt cttatccata aaaatatcgc 120
taaagaattc gtcgacagga tgggtgcatg gtccaaaaat atcaaggtgt cagacccgct 180
cgaggaaggt tgcaggcttg ggccagttgt tagtgaagga cagtatgaga agatcaagaa 240
gtttgtagcg aatgctaaaa gtgaaggtgc caccattctg actgggggtg tcaggcccaa 300
gcatctggag aaaggtttcc tcattgaacc cacaatcatc actgacatca acacatcaat 360
ggagatttgg agggaggaag tctttggtcc agtcctctgt gtgaaggaat tttctaccga 420
agaaggaacc atcgaactgg ccaatgatac tca 453

<210> 9951

<211> 453

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-D8

<400> 9951

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 aatacataga agaagctaga gatgttgggt cctattgtag tggagttttt gcaataggag 120
 tcttgttaca gaaaaataaa gaagaagttt tacatcaagg gtcttgttgc agaaaaatag 180
 agagaaaaag tttcgcaata ggtgtcttga tgcagtaaat taaagaagag aatattttgc 240
 aatagaggtc ttgttgcaaa aaattggaga agaagagatt tttgtcacat ggctcttgtt 300
 gcagaaagtt acacgagaag aggtttcaca acaggaacat tgctgcaaga aattacagaa 360
 caagaatgga cggctcgcct cttacaatcg gacggctcac gaggcagcgg gtctttttaa 420
 aagatccttc ggccgacgca tagcactgcc cta 453

<210> 9952
 <211> 376
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-017-Q1-E2-E1

 <400> 9952

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 cgatgatccc catatgagaa agcccgatat taccaaggcc aagcaactgc taggttggga 120
 gccaaaggta tctctgaagg aaggccttcc cttgatgggtg acagatttcc gcaaaaggat 180
 cttggatgag taatcaaggc aacagtgaga tgaatctatt tggttctgaa tgctgcgaat 240
 ataggcaaac gcgcttcacc aactggatcc gttcagtaca attctgtgtt tgtataacga 300
 ccttgtagaa tcatttaaatt ttgttttcgt cttggtgaga ctggacagaa gtaaccaatg 360
 gttttttgtt caaaaa 376

<210> 9953
 <211> 469
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-017-Q1-E2-E10

 <400> 9953

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 tatttataga gcaaagaggc ggtgcgggag gcacctaggt gggcataacc cacctggggc 120

cgccctgggcc cccaggtgcg ccctgggtggg tcgtgcccc cttggggcac ccctctcgta 180
 cttcttcagc ccattcttggtg tcttctgggtc cagaaaaaac cacaaaaagt tttgctgcgt 240
 ttggactccg tttggtattg atatcccgcg atgtaaaaaa catgcagaaa acaacaactg 300
 gtactggaca ctatgtcaat aggttagtac caaaaatgat ataaaatgac tataaaatga 360
 ttgtaaaaca tccaagaatg ataataaac agcatggaac aatcaaaaat tatagatacg 420
 ttggagacgt atcagcatcc ccaagcttaa ttcttgctcg tcctcgagt 469

<210> 9954
 <211> 466
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-017-Q1-E2-E11
 <400> 9954

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 tgccccctca tgcagacgtg taccatttag gcagccagtc acagcggtcc gccttgggcca 180
 gccaaaggtc cgggcagcta cagaggccaa tccagaaatg gaaaggccct gacaagatca 240
 gcaggatcta tgggtgattg atagacgaaa ctgactagga agaggagcgc cgtgtctgtc 300
 tcctttacc agtttagttc tagttggcac tgctggaaga gtctgcgtgt tgtaagacta 360
 aaacattatg ctgccgcaac ttgtattgtg tctgttgat gcgtgattgc agtgaactcg 420
 ccgctgggag agctgtatgg atggtagtgt tctggtcttc tggata 466

<210> 9955
 <211> 472
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-017-Q1-E2-E3
 <400> 9955

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 taatatcgag tatgaacaga tccccactt ttgcttttcg tgtggacgac tggggcactc 120

tgatctcttt tgtccacgc cagggactcg cgatgcaaag ggcgatctcc ccttcaattc 180
 tagcctcagg gcggtgagg atcggaagaa gggtttttct ggtgagagct catccaagga 240
 acggtatgaa acaaggcaaa gcacgaagga atcatggaca ccaagctctc agcagaacaa 300
 gggagtcgag gttacttccc cagtgaagaa cccctcattg aacaagcgca aggggtgggcc 360
 gcaacagggtt taccgtangg tggaaccagc cccgctcgcc atgacagaac atggggaagt 420
 gcatgcgact actgaagaag catcaggaaa aagctcagct gcagattctg aa 472

<210> 9956
 <211> 450
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-E5

<400> 9956

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 ccaactgcaca aatattcgct tcgccggatg agatgggtga gctgatgact aaaatggaag 120
 attttacgca ccgaggggtg gtctgcatc actccatagt gttctgaggg ggattcaatt 180
 cagcactaga cagccaaaag gaagacacaa taagctggcc aagctcatat gcatgcacct 240
 ctgccaaactg aaccatctaa tacctaccg gagtatgtaa tgctatctag gctgatgaat 300
 gaattatctg gtgcattatg gttagcaaca tggcatgctg ttctgttttc cctcattgat 360
 ccggctgtcc attaaactgc ttttaactga acttctattg gattgtctta gcttaattaa 420
 cctcttttat cttaatgaat aatatctttt 450

<210> 9957
 <211> 456
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-E6

<400> 9957

ggtccgaaat tcccgggtcc actaacagag caatgtctgt aggtgtgcta acaggctgctc 60
 ctgcagagga gatgcctggg tctatgggtg accttcttcc tgagctctcg caactgcttg 120
 atcaagtttg gcaggatgat caaggcatcg cccaggccct gtggccatcc gtctccatgc 180

ccgaaggtct tggagagctt gcgatgaatc taaagggagc acggcggcgc ttccgattgt 240
ggaagatatc agcctgccgt caaggcgcta gggaggcctg ggccatggtg aagacgcggt 300
acacaaaggc tgaccccaac cacatggccg aggtcggtec tgtagggccccc gatgggaagg 360
agatccttgt aaggtttagta tacggccaag tagagttggc cgcaaagtat tcctagtagg 420
actgtaaatt agacagcctg ttagatggta ttgaag 456

<210> 9958
<211> 329
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-E7

<400> 9958

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ttgccatgga atgggttctg tgaagccaga tcgtcatcac tagaatgaga acgagatcct 120
ggtaaacctg catcagaaga cgcgtcagaa cattggtcgc atgaaagttg ctttctcaat 180
aatgggtatg tcgaaaacgt gtgtgtgacc acgagcgcac gaatcgcgtc catttgctg 240
agaatcttcg cgacaagatc accgcgaata cttgcctgog catggcacac atctgttgct 300
acttgatcaa tgcgattacg cacagcttc 329

<210> 9959
<211> 446
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-E8

<400> 9959

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gagattaatg catctgcaag gatgacggtg gctgcaaacg agaaggcgga ggctgagaag 120
attgtccaga tcaagcgtgc cgagggtgaa gcagaggcca agtacctgtc tggcctgggt 180
atcgcgccgc agcgcaggc cattgtggat ggctgaggg acagcgtcct gagcttctca 240
gtcaatgcgc ctggcaccac tgcaaaggac gtgatggaca tgggtgctgat caccagtag 300
tttgacacta tgaaagaggt tggcgcgtcc tccaagtcct cggcgggtgtt catcccccat 360

ggccctggcg cggtgcgga catcgccacg cagatccgcc acggtcttct tcagggccag 420
tccgctctg acaactaagc actttg 446

<210> 9960
<211> 459
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-F10

<400> 9960

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gatcaatgca gctgcaatga tgagggtggc tgcaaacgac aaggcggagg ctgagaagat 120
tgtccagatc aagcgtgccg aggggtgaagc agaggccaag tacctgtctg gcctcggtat 180
cgcccgccag cgccaggcca ttgtggatgg cctgaggggac agcgtcctgg gcttctcagt 240
caacgtgcct ggcaccactg caaaggatgt gatggacatg gtgctgatca ccagtactt 300
tgatactatg aaagagatcg gcgcacctc caagtctctg gcggtgttca tcccccatgg 360
ccctggtgcg gtgcgcgaca tcgccacgca gatccgcgat ggtcttcttc aatgccagtc 420
tgctctgac aactagcagt tggctttgcc ggcataaac 459

<210> 9961
<211> 456
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-017-Q1-E2-F2

<400> 9961

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accatctcat cgaaacatcg gaagacctta gcctctagca agtggtatca gatttccagg 120
ttgcacggtg agattttaca gtttttcgta gattagatcg agtctgttcg tcagtaccta 180
cagggtccacg atgaaagcca caaaaagat tagggtagt gcatcatatc cgaaccaatc 240
tgagcctttg cataatcttt ttagggtttt tgcatgttg aatttgcggt tgcatcgtcg 300
tgtcaagttg atggtcttag agtccaatct tttagagttt caagttctgg tcataaattg 360
tcacgccgcc gccgcaacat catcatcgcc catctaccac ttttgcttat ccgccaacgc 420

tctgaatcca gatccatata ccaccagcaa tccgta

456

<210> 9962

<211> 460

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-F4

<400> 9962

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tccgaatcag gaccggccgc gtcacgagcc tcttgtgtta tcaagtgttc cttgcacgac 180
cactcgagag cctccgttcc ttctcgggcc atcgcaggag tcccccttc gatcccttca 240
gttgacctta ccggccgaga tgatctttca agaggaggca atgctaaagc atcggctaag 300
ttcaactcag gagaccacct cgatgccaga tttgggagcg gtacggctga ctcggtctg 360
agggcggaat cgaagtaact tcgcatcaa aatggacaga tgacttggaa tttctggaac 420
atttgctcat tggagtgtc catttaggca gacaggcaat 460

<210> 9963

<211> 457

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-F5

<400> 9963

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cgtccgtcac tgtaatacaa caggcggtaa tcgttgtgga atcatttggt gttctatgct 180
tatgtcttgg gtgttcattc atgtatgtat aatgcgagca caaatcgggc aactgtggta 240
gtggccactt ggtaacgagg ttctatctca tcgttctgga tgacttcatg gagcacgcgg 300
tatgttcaat ctcaatctat cacggtcggc atagcataaa tttgtgaaca tataccgtct 360
gttgctacgt tatctatata ttgcatcag atcattgtaa cattatctat ttttaattct 420
atagttcagt actttgcgtg catctatata tggatat 457

<210> 9964
 <211> 458
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-F8

<400> 9964

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 acccacagtt ctatTTTTta gtgagtttaa agactTTTTa aaatactagc aaaacgaccc 180
 atgcgtcgca actgaagaaa aaaaaatcat aatctcta at ggtcatgacc acattttgct 240
 gcatcacgca gatacactat cactttcatt ttcgtgaaat cgtgaacaat ttttgaaaat 300
 catgaacatt tttttaactg atgaacatat ctgaaatcgt gaacattttc caaatacttg 360
 aacaatttta aaaaattgca aactttgtct aaaatcataa acgttttatg aattcatgag 420
 cattttatac tatttgcaaa aaataaaaaa ttatgaac 458

<210> 9965
 <211> 467
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-017-Q1-E2-G1

<400> 9965

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 aggggtttga ttcgttcttt gagcaaaaag ataaggctcg aataccggag ttctttcttt 180
 gcttccaaga acatagattc cttcttcaac ccaggatcat accgagggcg ggtatctcac 240
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 ttctttctttc cggaagcta tgggcacctc acaattctta tacgacatta gtggaagcga 420
 acattcgtag cattcattgt caccgatcat tgacaaaaga agaaaaa 467

<210> 9966
 <211> 458
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-G10

<400> 9966

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gacttatatc cgcatactat atcatcattg aaggcaagtt cgggggctac tgaggggagtc  180
ctagattcgg gggctctcaa gtgtccgtcc caggagtatg ggccagggtg gatgggtcat  240
acaagatcaa gctgaagact atccttcgtg tccatgtggg acttctccat acgtaaacta  300
caagattaga gtccagatgt atcatttcct tccctgatga accgaccttg taaaaacct  360
aggccccctc ggtgtgtata taaactggag gggtagtcc gtagaggcta tccacattac  420
tatcatcaga atattcacag gctagacatc tagggttt                               458
  
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<210> 9967
 <211> 433
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-G12

<400> 9967

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agtttagatc gagtctgttc ttcataccta tagtccacga aaaagccaaa aaaaataggg  180
ttagttcatc ccatccgaac caatctgagc cttgcaattt tcttttcatt gcttgcatag  240
ttgaattatc ggttgcatca tcgtgtcgag ttgctggtct tagtgtctag ttcgtttaga  300
gtttcgagtt tttttcacat tagtcacgcc accgctgcat cattatctct tccgctgtcc  360
accacccatc catcaatttc caccacgtgc taccaccat tcattgtcat aataatagtt  420
gggatctagt ttg                               433
  
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<210> 9968

<211> 426
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-G3

<400> 9968

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 aatctttgtt caccacttg ttgctgctgg attcttggtta ctgggatctg tcgatctgga 180
 aaacattatt gtcgtcccat ttagttaccc ctcttacaga aatgctgctg gttttgtttt 240
 tgagtgatgc cctggtcttg aatgtctgct acctttaaat agttgaactg ctgagcgggt 300
 tgtaatggcg aaacatctat catgtggagt aaaatcagtc ttgataaaa aaaaaaagg 360
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 gatagg 426

<210> 9969
 <211> 449
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-G4

<400> 9969

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 gtagtactcc taaaaccat accgccgcac gcatcatcag ttttcttcaa gaggacgagg 120
 gagaagcgga tttgtagtgg aggcgcttta aaaaaaggat ttgtagtgga ggcccctacc 180
 ctaagggtgcc ctaggtagct accgcacaca tcattggttt tcttttttct ttatactctt 240
 gcgccctaga gtgaaatgat ggttgcttca tccgtccaac ttaatgcggg aaagggtggg 300
 ctttgtgatt tgaccctca tcgctcattt actactattg cggcgctacg accggggtgc 360
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<210> 9970
 <211> 429
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-G7

<400> 9970

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taatgagaag aacaaactac cggatgcaaa tatcaagcaa gccgaagaac tgaaggattt   180
aagagcccaa ctatcggatg ctttcaagga gaacaggaag ctgagaggca gcatattcag   240
tatgctcttt aacctgactg tcacatgggtc tcctgtttga aaatttgaca agtttacttc   300
tgtaggtgtg ctaatcagac accccgaagg agaagtgtct ggattccaag gcgaccagct   360
acaagagcta tcaaaggtgc acgagcaagc acgaaaagca ttgaggaaca tggctaaaca   420
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<210> 9971

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-G9

<400> 9971

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gttaatggga gacgttctat actacggaga caaccactct gcggtggtgc agctgcacgg   180
ccgacctgac gtggaaaagc tgatcgacga gaatcgcaact ggaggcaagc tgatcgtgct   240
tgacgttggg ctaaaacatt gtggtccttg cgtaaagtg tatccgaccg tgctgaaact   300
gtccccggtc atgtccgaga cagtcgtatt cgctagaatg aacggtgacg agaacgatag   360
ttgtatggag tttct                                     375
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<210> 9972

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-H12

<400> 9972

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ttctgcatat gatcaagctt tgcttccgac cgggtgcttcg gtagttctac atttttatca 180
tggttgaaaa tgcattccac cgtgcactac tcatcgatga tttgcacata agcttgaaac 240
caattaacaa ttgcatcgcc tggaggcacg agggagtctg atgttacgag agcacatgaa 300
gacaaggcag ctaatgtttc tgttcaagat gtcaaccaca tcttcatagc ctgattctcg 360
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aaattagtat cggaggtttg gaccac 446

<210> 9973

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-H5

<400> 9973

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aggatcttgt tgattttgcc aagaagaatc catcttctcc atctaaacca gccaacagcc 120
gcaggactcg ctgagtgatg agtggttcag tcatgtaaca cacataattg agttgccagg 180
ctgctgggtt tgctacaggt cggcgaatta gatatatcat caaataagag ggttcggtcg 240
gtctgttctt tattgcctca gggaattatt tgggtctgcg attggacaat tagagtcaca 300
ggtgtcagat acgtagtcat gatactgggt gtggtgtgta gcgagttgca tttctcacct 360
ttttcttctg tggtattggg taccgattcg tgctttattt tacttagctg tatatatttc 420
tccatttgac ggcagtattc tattc 445

<210> 9974

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-H6

<400> 9974

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 tttttcatag ctaagatcga gtctgttctt catacctaca gtccacgaaa aaagccaaaa 180
 aattaggggtt agttcatcat atccaaacca atctgagcct ttgcatagtc ttttttagagt 240
 tttgctttgt tgaatttgcg gttgcatcat catgtcgagt tgctgggtctt agcgtctagt 300
 cccttagagt ttcgagttct gttcataggt tgtcatgccg ctgccgcacc atcgatcatca 360
 tcattgccat ataccaccac cccagcctat acatgccac tgccatatac gaccaccaat 420
 ccgagtcgcg atataccatc gccatata 448

<210> 9975
 <211> 460
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-H7

<400> 9975

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 ttgatctcgg gacgggaaac aacaacaaga tcaactgggc aatgaaagac aagcaagagt 180
 ttgttgacat tgtggagact gtctacagag gagctcgtaa ggggcgtggc ctgggtgattg 240
 ctcccaagga ttactccaca aaataccgtt actgaggtat ctgtgcctgg ctattcatgt 300
 gcagtgtgtg gcctgctctg ttccgtgata tgcgctgtgt gacccttgat gtaatgtctg 360
 tcaactttga aagtgtcgta actatgtatt tgtatcttga atatcaacat gtcataaacc 420
 tgcaaccctt taaaacaaga cctgctgtct attggtatta 460

<210> 9976
 <211> 466
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-H8

<400> 9976

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 cgacaaatgc tctaaaaaca gtaaacaatga gacattaata cctgattagc ggcagcagca 180
 tcatcgacat cgtcctcgtc atcagcattg aagtcagcat catccttttc ctctggatta 240
 acacgagacc acttctttgc aggtggaacc ttgcgcttca cgccgcattt cttcccctta 300
 ccagatgcac cagcaccaag taaagaaggt gtagactcgg cagtggcaag cacacgagga 360
 ctacagcgtg gcgtaccacc aaggcctaac cttcatctt caacaacttc tgcaggcctt 420
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<210> 9977

<211> 451

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-A2

<400> 9977

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 gcactgtttg cgatcgaagg agttacaaga gtattctttg gatctgattt tgtaactgtg 180
 aaaaaatctg atgagacttc atgggactat cttaagcctg aggtctttgc tgcgataatg 240
 gatttctact catctggaca gccacttttc ctggactcaa ataccgcagc tgctatggac 300
 acagcaattc atgaggatga ttcagaaata gttgctatga taaaagaact gttggagacc 360
 cgtattcgtc cggctgttca agatgatggt ggtgacattg aataccgagg atttgagcca 420
 gaaacaggaa tagtgaagct aaaaatgcaa g 451

<210> 9978

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-A4

<400> 9978

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catccgactc attcgaggac ctatcccca ccatcggcgt ggacttcaag gtgaagatgg 180
 ttaacattgc cggcaagaag ctcaagctcg ccgtctggga caccgctgga caggaacggt 240
 ttaggacctt gaccagctct tactacagag gggcacaagg gatcatcatg ggtatgtacg 300
 atgttactcg ccgagaaaca ttcaccaatc tctctgacat atgggccaag gaaattgacc 360
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 gtgagagggc tgtcaccaag 440

<210> 9979
 <211> 433
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-018-Q1-E1-A8
 <400> 9979

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 ggcgaagcat cccccgatc tcatcatgtg ccggaagcag cccggcatcg ccatcggccg 180
 cctgtgtgag aagtgcgacg gcaagtgcgt catctgcgac tcgtacgtgc gccctgcac 240
 cctcgtccgt gtctgcgacg agtgcaacta cggctcgttc caggggaggt gcgtcatctg 300
 cggaggggtc ggcattctcg acgcctacta ctgcaaggag tgcacgcagc aggagaagga 360
 ccgcgacggg tgccccaaga tcgtgaacct ggggagcgcc aagaccgacc tcttctatga 420
 gcgcaagaaa tac 433

<210> 9980
 <211> 443
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-018-Q1-E1-B2
 <400> 9980

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 gttccacagg atcaaaacct gactctctg tacagccctg ttactaatgg ttatttccca 180

cgcttggctt catatttaat tcacgggccca ccttcctaatt gctctattct ggtatcagac 240
gcaataactta ctctcgttgc tctgaaaccc tttctcactc cggttcagac ttogagaaac 300
tatctatccg cttggaacct cttattgtac ctttgtacct taccctcgac atattttatt 360
ggttcaactc aagagatact cttatgctca ttcattgggtt aaccctagat tgtctctctc 420
ataagcattc tgtcgtagcc gag 443

<210> 9981
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-B3

<400> 9981

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ctgtgtacac tcacaaacat atctgtccct taacctataa gtcttcaata caccaaaatt 120
actaaggggc actaaatgca cttacacttt caccaccttc ttaagtgtgg agttgttgcc 180
tatctagtga accttcgtca tttgtttcac tccatccctc tggatgtatg cttcgtgttt 240
cagctcgaga gatgttttaa tgactcacc cgtgagttga tcctgagttg tttgatcttc 300
gaggagatcg atccttctag agttttccct ttctctctgt tgtcatgttg gttggagtcc 360
tcggagcaag acatcgagac aaagatggtg atcgaatcaa cgttcttatg aagtggacct 420
ggattgtgaa gattgt 436

<210> 9982
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-B5

<400> 9982

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aagactctca ccgggaagga gatcgaaatc gacattgagc ccaccgacac gattgatagg 120
atcaaggagc gtgttgagga gaaagaaggc attcctcctg tgcagcaaag gctgatttat 180
gctggtaagc agcttgcaga tgacaagact gccaaaggact acaacatcga aggtggctcg 240

gtcctccatc ttgtccttgc tctgaggggt ggttactagt taagctgtaa tggaaacgct 300
 tgcgtcctga gagaagtgac cattgggtggc atggaacctg tgttgcaaag agataataac 360
 aaactagctt tgcttagtgg gaggggctgt cttccatggt atctgcctat atgatttgac 420
 aaaactactc 430

<210> 9983
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-018-Q1-E1-B8
 <400> 9983

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 cctgaagttt aggactgac aagctcagga cgcaaagaag atggagaagc ttaacaacat 180
 ctttttcgct ctcatgactc gtggacctga tgctgatata agcgaggttt caggggaagga 240
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 gggtttcttt cagaaagatc acaactggga gtggtgggtg gatattttga tcgactcctg 360
 ttagccatgt tacaactgtg agtgggtgggt ggtctaagag tggtagtag ttttctaaga 420
 caatgtgcgc catcgttgga 440

<210> 9984
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-018-Q1-E1-C1
 <400> 9984

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 atgaactcat tatacaattc tactccatgg cacacttcta tccagatggt aggatagttt 180
 ggatgtctga aggaacgaga taccagtcaa ccatagagga atgggcgagt ctgatcaatg 240
 ccccagagga gagtgaagat gacttggaca tttatgccaa gaagaaaatg gatcataact 300

caatgtcaca catgtacaag gagatccctg atgaagcact tgagattttc aagtttggat 360
cagttcattt tcttctgtca gggctgccta caatcaacta ggtcttaagg cacactcctt 420
tgcccaaata aggtgatcac aacatga 447

<210> 9985
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-C3

<400> 9985

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tagtttagat cgagtctgtt cttcatacct acagtccacg aaaaagccac aaaaaaaaaat 180
tagggtagt tcatcatatc cgaaccaatc tgagcctttg cataatcttt ttagggtttt 240
gctttgttga atttgcggtt gcacgctcgt ttctagttgc tggctcttaga gtctagtctt 300
ttagagtttc gagttctggt cataagttgt cacgccgcg cgcaccatc atcatcacc 360
ctaccatcta gcaccaccgc ttatccgcca ccgcttcgaa tccgtatcca tataccaccg 420
ccgctgtcat ataccaccac cgctgccat 449

<210> 9986
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-C6

<400> 9986

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gcatgaagta ttcttccgct tctttgagtc tgggtgaagc ttcccgcaag atgtcatggc 120
acttctccat gcagcccggc catccactgg ttgctctagg gtgcccata aatccatcct 180
tcagccagta gtgtgtactg aattcttgct atcctatctt gaattctcga ggtcctgaag 240
atgcagtcct tgtcgatgcc atcatggagt tgttgctatt gaagtagagt cctccattct 300
cacaccactc ccgaacactc ataccaaccc cgtctactat agtgtagcat ttaaaactaa 360

acaatgtccc gggcttggtg tagcacggtg atgggttcct acctcatgca tactactcaa 420
ctacaaggat tcaattcact act 443

<210> 9987
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-C7

<400> 9987

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gtggccatca tgggtggcat tgtgtatttg tctatcttcc aggcacgcgt tccaagtgc 180
tcaggctggt tctatcctt ctgcattgag acaaaggagc tgaagaaggc ctgccctatc 240
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aaggatgaact ctctcggcta gaagggtgctc aactagtaag aggaagaaga aactagaac 360
tagaagtcgg tcattttgtc tgtactctgt atattacctt ttgttatcag atgatggtat 420
gttgctatgg ttctatgcat gttttcttg 449

<210> 9988
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-C8

<400> 9988

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agtttagatc gagtctgttc ttcataccta caatccacga aaagagccac agtggattag 180
ggttagttca tcatatccga atcagtctga gccttcgcat aatcttttta cggttttgct 240
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gagggttcgag ttctgggtaa aagttgtcac gccgacgccg gatgatcatc atcacacctg 360
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441

<210> 9989
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-D7

<400> 9989

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aacatggatc gatctcgggt gagtattaag tatggacttg gccacgtagt agcttcgttt 240
gcaccgttgt ctaaaaaaaaa cttcatgtgc gccgggtcaac tgctgaacca acaatcgttc 300
atcaccagtt gactttttaa aataatggat ctaaaaaatt tgacaaattc caaaaagggt 360
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tggattttcg aaaagagatc gcaaa 445

<210> 9990
<211> 446
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-E4

<400> 9990

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tcacatttcg ctgaggttgt cacacattaa tgtaatacgc tgggactact acaataacta 180
tgtatgccat ttctgctac ttgatgtaa ccaactcaatg tctgcagtac attagtggca 240
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ccgttcatgt aacatcatga ctcttcaata tggtcactta gactcaattc actggacgtc 360
tttttacaat gtcgtaagtg ggacaatcct gtagttactc aactttactc acttgcagca 420
gatccccctt tccccatctg acatta 446

<210> 9991
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-E5

<400> 9991

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 tccaccaaga ggggtgctgc tctatgggtcc tccaggcact ggcaagacca tgcttgctaa 240
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 gaagtacttg ggtgagggcc caaggatggt tcgagatgta ttccgcttag ctaaagagaa 360
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 ccagaccggg gctgaccgag aag 443

<210> 9992
 <211> 459
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-E7

<400> 9992

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 caaacaacc tgccgcacca agaggaaggg cccgttcaag aagaggtgga ggaagcctgt 360
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<210> 9993

<211> 443
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-E8

<400> 9993

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cccagctggg ggtcgctcgg ggctaaataa gtccatatat gcatgcacgt gtcgtgcatg 240
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cttgccgttt gatgatgcat gccatgccgt ctcatatata cgtagtgatg cttaatgctt 360
tgcttgcttt tcttatcttc gttggtgatg taagaataat ttgattgaag agttattagt 420
gaaagacata gtatgcacaa aaa 443
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<210> 9994
 <211> 468
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-018-Q1-E1-F1

<400> 9994

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caccataa catctctaga caaccatagc tttgtttaat cctccatttt taagagtttt 180
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cagttaagcc agttttggca tttttttcta atacagaagt tagtaccxaa taatcatgtt 300
aaacagcata ggacatcata ttggaattac ataatatagc atatagccta gctaatatcc 360
ttgtttacgc gattttctga gaacacttgg gagttacgtg tcatgtctat tatccatttt 420
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<210> 9995
 <211> 445

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-018-Q1-E1-F3

 <400> 9995

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 gggcgctggt tggaggaaat ggatctggga ggatcccaag ggaagagga ctggtggcgg 180
 cggctgggag gatggaacaa ggctccta atttacgggt tggctctaaa atggacaagg 240
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 gataaatacg ttaggtagcc caaataagaa aacggagatg ttttatagat gtttggggat 360
 gatccggacc catcggtaac gacagcccgg gtcgggtccg gaaaaatttc ggacacggca 420
 agaaaggtcg tggttgtgta aagag 445

<210> 9996
 <211> 443
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-018-Q1-E1-F6

 <400> 9996

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 agtccatgct gttgtggctg aagcgactta tggatgccga catgcttgaa gattttgaag 180
 atgaaaccga cctcaacctg gtatggattc tgcgatttg gtcactatca atgttgatat 240
 gaatgatttt gtttaataac atattaatat ttttagataa tgaactacat ctaaaacttt 300
 tttttatgta gtgaagtaga tctgaacctc gctgttggag ttgatctttg agtcgatgtt 360
 aagtaaaagt tacatctact tgttgatgcc aagaccgcca tttcgttcct aaatgtccct 420
 gccttcttat gtttcaccaa tag 443

<210> 9997
 <211> 116
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-F8

<400> 9997

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tttgccctcta gcaagtggca tcagatttct aggatgctcg gtgcaacttt ccactt 116

<210> 9998

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-G1

<400> 9998

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aacggtgcag tcgtttgaac ctcaaaacgc agtcatttca gaatctcaag actgatgcct 180
tcgaccagct caagaccagc ggaaggagtt ggatcaaaaa agtgctcttt agtttgtggt 240
cggcatacac caccatgtgc aggatcacac aaggaaatct gttggagcaa aaccttgccc 300
tagctcttcc tcgagtctac ctctccctct ctgtgtcacc tcaactctagc ataaactgat 360
tagagaaaga agaaagtga gagttctttt gagaagtcgt ttgggaatat ttccggttct 420
gctaaaggaa gagagaatat cttcacctt 449

<210> 9999

<211> 421

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-G3

<400> 9999

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tcctaaggct gttgcaaagt ttgcagccgt cgcggcattg tgcgtccaat acgaagccga 180
cttccggcca aacatgagca tcgccgtcaa ggcgctccag cccctgctga atgcgcgagc 240
agccccacct ggggctgagc atgccggacg ctaagctcca ctccctgtat gatataatag 300

ataaggaaaa atgagccatc aattgttggt cttgcggggc gcgtggcagg cggtttttgt 360
acatttgatga ttattcttcc caagttgtaa ccctcgagat tctagtacca gaaatatttg 420
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<210> 10000
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-G8

<400> 10000

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tccccaaagt gagtcgctgt gacgccggcg gcaagacata catgaccagg tgcgttgccg 120
gtgcaagtgg agatccatgc cgcggtgaca ggcgctgtga cggcgtcatc cacagcgaga 180
tgccctgtgt ggtcttggtg ctgcgaaggc aaagttcatg gcaagagggt tgcaggatgat 240
ctgcatcaag attagaggag ttgacatgac aagattaggg aggtgaatgt taggattaat 300
cttgtctagc cgagctgaga gagtcagtta gtttgtagc tgcgtgaggg tcgtgtgcct 360
agagtgatcc taggaggaag aagtgggtcaa gataagatta gatgggtgca tgtgaagtgg 420
cgtgagtggg tcagtttgtt a 441

<210> 10001
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-H1

<400> 10001

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tgatatatcc agcctcttca acacaacgtc aatcaatgca tatgtgactg cttgttactg 180
acggtgactt catgatatgt tccggataca gaacgattga tcgatcattt tatggatgat 240
catcagccta tttgtcattt catctacgca tctacatgct ggactcatga ttctgatata 300
tttagtaatt tcgacgttca ggatcattca gttgtcattt acatcagccg caccatcaat 360

cattcgccca atct

374

<210> 10002

<211> 441

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-018-Q1-E1-H3

<400> 10002

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gtcatgacaa gattattatg caacgtaggg agtggaggag aactagctgc atctccagtg 120
gaaagcaggg aatcccttac aattgaatta agatcatctt ttttgtgggg attattatgt 180
aacgtangga gtggaggaga ctgttcatga gtcggtcatg acaaggttat tatgcaatgt 240
anggagtgga ggagaactag ctgcatctcc agcggcaagc aggtaatccc tttcaattga 300
attaagatca aattaggaag aggaacggtc caggctctga tagatgcgcc ttatgtgggg 360
cagttgaaaa caccgagcac attttttttc attgctcgct ggccaaattt ctttggagtt 420
gtattagaca ttggcttcat g 441

<210> 10003

<211> 397

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-H6

<400> 10003

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tccctaacta tactatatta ttattattta tctctttttt tttcttttta tcaatgggtt 120
taagattcat tagctttctc attctactct ttcacaaagg aatgcgaaga gaactcaatg 180
gatcttatcc tattcattga atagatttct tttttattag agtatcggca agaagtcttg 240
gttattcact ctatttttaa gttttattta agtaaaccat gcacaatgca taggaactacc 300
ccccattttt caaattttaa atttgaaata ctttaattaa tttttagtcc ttttaattga 360
catagataca aatactctac taggatgatg cacaaga 397

<210> 10004
 <211> 399
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-029-Q1-E1-A11

 <400> 10004

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 aaaaccaaag gtttcctccg aatggtatca caactgacgc ttattcaggg cttaaaataa 120
 ggctaaaagg catatacgat ggacaacagg tcaataatcc ggtcataccc ctgtttagtc 180
 acgcggggaca gagaaggcta cgttagccta cagatggtta agtgtttaag gacacaaggt 240
 taccctgcct cttaagggtg gtaaggggtt gcaaaaactc ctcgagccga cgtcggaata 300
 tcaagcactg catctctgaa gtacgatatc tatgccatag ccccttgatt gacttgacat 360
 acatttaaca caatggtgca tgtacctgac acctataca 399

<210> 10005
 <211> 410
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-029-Q1-E1-A12

 <400> 10005

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 gcactatcta gctatcataa gttttcaaag aaattgatgg cggcgggctca gcaacatcat 120
 ggcgaatggc aaagcttcta aaatggacgg gagagaggtg gtgacgcatg gctgggagac 180
 gtacagattt gaggaaatat gacgcatgag gtttcatatt aaaaaaatga tagcctttgt 240
 aagaaaagat atgacgtaca tttgtgcaaa ttgataatga catgcatgct atttctgaaa 300
 aaagaagctt ctctgttggc atccctgatg gtaccttttag atacgcagga agagaaatgg 360
 tgtctcataa ttcattggat gtgaccagta ggtcatatca tcatgttttg 410

<210> 10006
 <211> 419
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-C12

<400> 10006

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aacaatgcag ctcacttgac cataaagaag tggaaccaag cagtagacta aacataagat 120
aaagggagga taacaaagt t caataaaaca acctttatct gcaaaaaata gaagtgatgt 180
gaaatcaagg caacacttcc tcgatgttag ccaactatag agcatggcct ttctgatgta 240
gccaatgtgc tccaccccaa acttagcaac tcgaacacca tcccatgtct gcaagaattg 300
aaacatatag aatccacaat catgcctgca ataaaaagaa taaaaacttt agtttcacaa 360
aaatgaacgg aaaaaacttg aacagtatgc catagaacgg ttgtacagaa cgcacccat 419

<210> 10007

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-D10

<400> 10007

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gtttcactcg aagacctgct cccggggagc ggataccgca gagccaccg gacagtgttt 120
accagcctgt gcctcccctg aggatgccac cattcttgtg aagaaagacc atttctccca 180
tcgctgtgta tatcgggaat tatttgtttc gagagaggcc gagtttagac tgttgaaggg 240
taccgaaat gatgccactg gcgtgtgctt ggtgttttta gggttctctt gccagcggac 300
ctggatttca ttcaaattggc tgtggtgact tatgagatcg catatgttgc ggtggtcggg 360
attgtttgta aacgtttgcc gaaactgctg ccgttggaaca tgattgtgat gccattactc 420
attgccgc 428

<210> 10008

<211> 359

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-E12

<400> 10008

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aatgtcgcac atagaactat catctgcggg tggttcctgtg cttgaggatt aaccaaatta 120
ctgctactat cgtccatttg gtccaagtgg tgcttgcaac gtcggcactc atctcctcta 180
tttcagtctt gacaagaaac agtaggggtat acatatatac aggcagggaa tcaagcgttg 240
gcaccgtgcc atgccaacga catactgaac gcggagacac aattaacttt tatgtgtatg 300
taattatgta ttgcacatca tgattcggct acgtgatggc aatctcctaa gtgttagca 359

<210> 10009
<211> 455
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-029-Q1-E1-F10

<400> 10009

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tccccaattt gctatcctct gctttgctgg tcaccagac gaaaacctta atttgacta 180
ttaaaggaaa ccctacttca tgcagactaa tccatgtctg ggataataag gaaagtaagg 240
aagaaagtat tgtcgaagag actaggtatc gaacccgcat ctaggttgaa aaggggaaaa 300
tcagtagcta aggaacgagt ctctgtctc ttgttttttt ttgacatggc cgtgtctctt 360
ggttgaaaag ggtagaaaga catgaaaatg caatagagaa tgaacaggtc aatcagtttg 420
ttttcctcac atangaaaaa ggtggctaaa gagaa 455

<210> 10010
<211> 328
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-F11

<400> 10010

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cgacatccag gccaaagaagg ttaacaccct gatcaggcct gatggcaaga acaaggcgta 120
cgtgaacctg acaccaaact acgatgctct tgacgtggcc aacaagatct gcatcactat 180

aaatcaagat ggactgtcct gcaactaggcg cctgtgtcct ggtctcctat gttactggaa 240
 ttatgtaatt gctacttagc aaaggggcac aatggctcca ttgcctacca tatcgccgca 300
 caatttcacg aacttgatgc aatctcaa 328

<210> 10011
 <211> 381
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-029-Q1-E1-F12
 <400> 10011

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 tatcatcgct cgggtcccaat gtaactctga gatcttttga caaaaaaggt atatttgaac 120
 ctaataacac gcaatatacg gctgtctcag caagagcaac tcgagcgggc tgagagcagg 180
 aaaaaatcta ttttaaacc tgaactcata gacgttcagc atatcaaacc ctcaagtcca 240
 aatccacgtc gtttgcacct gaactatgca atctcggttt aattcgaaac ctggcatctt 300
 ttgaggaatg aaaacgctga cgtggccatg tcaatcgga ttcgtctgac tgggtgcacca 360
 ttgagcggca tcagtgatca c 381

<210> 10012
 <211> 453
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-029-Q1-E1-G11
 <400> 10012

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 gtacctcagg ccacttctc gagtagtaaa aaatagagca taaatattgc aagattttca 180
 aaggatanga acaacgctaa tttatagtgg tggaatacag atggtgcact gccgagccac 240
 ccatgtgtca tatatttgtt ttatgtgctt ttctatgata tcacgagcg tacaacaag 300
 ctcgtgggaa aaaaatgatg gcacatcca ccacgtcgaa aacaatacgg aggcataaaa 360

ctaagtgtgc atcatagtac gccaccaacc ttaagtcgag tgtgacaaat aagtaaataca 420
aagctcttac catgtgtaca cttcaaataga caa 453

<210> 10013
<211> 444
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-029-Q1-E1-G12
<400> 10013

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atcatgaatg agcttttccac agctgttcgt ggaaaagggtg cttttctcaa tggttctcca 180
attaaaacat cgcctcaaaa tgagttgggtg aaggctctta tggtgacaga ggtagggacc 240
aaaagagaca agtccacttt ggatgatata accaacagaa ttaataagtt actattcaag 300
attagatcta tacgtatgtg tggctctttg gctctaaaca tgtgtggagt tgcttgtggt 360
aggctagatt tgtgttatga gatcggtttt ggtggcccct gggatgtggc tgctggagct 420
ttgattctaa aagaagctgg gggg 444

<210> 10014
<211> 409
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-029-Q1-E1-H11
<400> 10014

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tctctgttgc atacaagaat gtgattggag cccgccgtgc ctcatggcgc atcatctcct 120
ccattgaaca gaaggaggag agccgtggca acgaggaccg ggtcacactc atcaaggaat 180
accgtggcaa gatcgaaact gagcttatca agatctgtga tggcatcctc aagctgctcg 240
aaaccacact tgtcccgtct tccactgcc ctgagtccaa ggtcttttat cttaagatga 300
agggtgacta ctacaggtat cttgccgaat tcaagagtgg gcctgagagg aaggatgctg 360
ctgacaatac catggtggca tacacggctg ctcaggatat tgctttggc 409

<210> 10015
 <211> 414
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-H12

<400> 10015

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 attcgcccggt gggctcgccg atgagcaggg attcactttc aggatttctc actatgtgct 180
 ccacccttga gggcatgcta attcctagtt ttgtgtgtgc ttatctgcag caaccatgtc 240
 agtgtttgtc agtatcaaca tgaacgcaat tcaaaagttg ccggcatgaa gtgagcaacc 300
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 atgtatggtg tagatacctt ttttgccgag aatcttcac cgtggtagta agtg 414

<210> 10016
 <211> 439
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-030-Q1-E1-A10

<400> 10016

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 tgtggatctc acgtacaatc gagactgggc ggcttgcgtc gcgtctgttc ataccacctg 120
 cacagtgcag cgactcaact gccagtctgg catcacgac gcacacgaga ggacgacgac 180
 gaagaatacg gccatgggag cttgcgatac ttgaaacgg tccaagtctt gggcgatgct 240
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 gccttttggg cgcaggagaa gcatcacctg caagatgtta gtgagaacat ctccaacagg 360
 cgtgcaacat gcggcgcgca actcattcct tctttgggag ggtctacaag ctgacgctct 420
 aaacgatgca cacttacgt 439

<210> 10017
 <211> 341
 <212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-030-Q1-E1-A9

<400> 10017

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ggggaataac aaggtaaatt caaagtaaag ttaaggggaa ttatccggca aacaaaatgc 180
ctaatagagga caatcatttt gatgaccctt tagcagcgag tagtgagaac ttacctaata 240
aagaagctat tcagttcacg gagcagcatg gtagcagaag aaagtcaacc tcaaaggggtg 300
gaacaaaaca tgtgcccaca ngaatatcag agaaaggtgc c 341

<210> 10018

<211> 455

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-030-Q1-E1-B10

<400> 10018

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aatggcatca atagactatg atcttgatgc tgacttctct caccgcaagt ccgggcatag 180
ttgatctagg cagcatgctt ctatggcata agcagcacct ttggactttg tcattcgtcg 240
atagtccaaa attgaccccg aatagatact ggctcgtgct aagcaacaag ttcaagacca 300
gcgccggctg acgatgagct agaaactgca gtagctgaaa acgccgaata agaaaaacct 360
ccaagcttcg aagcttattg ttgaacggcg tgggatggtc aaatacctgt aagctagaca 420
cccccgacag ccttgcgatg catatgattg tgtgc 455

<210> 10019

<211> 400

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-030-Q1-E1-C11

<400> 10019

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 cccgagtaag tcctcccctc aaccgccccg tatcatatga attcttagat ttcgatcggt 180
 tttctttaaa cattctgtgt tttctgaagt gacacacatt gcacgctcaa cctcctaagc 240
 cccaaatatt ccatggccac gtatttcgaa cgggaccgcc aatcaaacgt tgactactca 300
 aatgtcaaca aggttcttga tgatgttctc cacggctacg tcaaactctgg aggcaccttc 360
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<210> 10020
 <211> 444
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-030-Q1-E1-D11
 <400> 10020

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 gaacaagaac aagaagcttg ttaagaagct agccaagaag taccatgctt tcttggcatc 120
 agaggccata atcaagcaga tcctcgtct ccttggccct ggtcttaaca aggcaggcaa 180
 gtttcccact ctggttagtc accaggaatc tcttgaagcc aaggtcaacg agacaaaagc 240
 tacagtcaag ttccagctaa agaaggttct ttgcatgggt gttgctgtag gcaacttgct 300
 gatggacgag aagcagatcc aacaaaacat ccaaattgagc gtcaacttcc ttgtgtcnct 360
 cctgaagaag aattggcaga atgtgaggtg cctgtacgtg aagagcacat ggggaaacgt 420
 gtacgtgtgt tctaagtgtg tgcg 444

<210> 10021
 <211> 452
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-030-Q1-E1-D12
 <400> 10021

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acgtgtacca tttaggcagc cagtcacagc gttccgcctt ggctagccaa aggtccgggc 180
agctacagag gccaatccag aaatggaaag gccccgacaa gatcagcagg atctatggtg 240
attggataga cgaaactgac taggaagagg agcgccgtgt ctgtctcctt taccagttt 300
agttctagtt ggcatgcaa aaacctagtg ctggaagagt ctgcgtggtg taagactaaa 360
acattatgct gccgcaactt gtattgtgtc tgttgatgc tgattgcagt gaactcggcg 420
ctgggagagc tgtatggatg gtagtgttct gg 452

<210> 10022
<211> 354
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-031-Q1-E1-A10
<400> 10022

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ctggatttgg ccaggttcct ggcacatggc acttcaggtg cacgatcctt ccgcaggagg 120
agaagatccc ggcgatcatc tcccgttca cggtgttcca tgagacgttc atggcagagt 180
accgtgacta aactggtgta acatgtgtgg gattacatgc aagcctcgtg gatcttcctt 240
aggcgttttt gccccggtt acagcagtat catgtagacg agacaaaata aagcaaattc 300
atggcttgtg tgtgtgatat actatatcag attccgaaac agatttacag tcag 354

<210> 10023
<211> 429
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-031-Q1-E1-A8
<400> 10023

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gacatgagga ttgctagcca ctcccggggc ccctcctggt atttcttctt ccaatatttt 120
ttaataattt taaaataaat ctccataaat ttttaggtca tttggagctt ttcggagaat 180
agctatctca agtgtaactc ttttcaggtc gagaattcca gctgacggca attttcctct 240

ccatataaat cttgcataat aagagagaaa agacattaaa attgcatcat aaagtgaaat 300
attgacccaa aacattataa atatcagtag gaaaacatga tgcaatatgg ccgtatcacc 360
gttgggtgtac cggagcataa ggctttcgcc tgaatccatt cacgcaccac actgaggaag 420
ctcgaacac 429

<210> 10024
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-B7

<400> 10024

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atatttgagg aagtaccta tggtactagt tttagagggg tggtagtata tgttcatgga 120
ttttaccctc atgcgggggg aacagttgtc cgacctggga gatttcctgg ccacattaat 180
ggtgtttacc aactgggtga ttttacatac cttgacggag acttcacatc tgagtctgga 240
acgtctggtg gaccagttac catgggagat agagttattg gagtaaatgt gcaaagtgtg 300
ggaggatcga gatgcgcggg tccccctctg aactataca tgacatttat gaattggtgt 360
ggttttaatg gcggtatacca tacaattgct gcgatgatac aacgccttgc tgctaataca 420
gttttgcaat gtcaagcatc a 441

<210> 10025
<211> 473
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-B8

<400> 10025

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tctggggtaa acactatttc ctggttggcg gttgctgtcg atgacgattg taagcatgcc 180
gtcagtgtat ctcgtttgac catacaaggc cgacgagcgc aaggatgccc acacatcat 240
cttgacaacc atccatgtaa tcggcatgca cagggcgcct gaaagtccac ttgctttgac 300

catggatgca caacccaaaa ttttggctcg caccagtggc agtagcagca gagaaaacat 360
gatttagtgc aacggaagtt catttcataa tgatccgtcc aaattacatc agccaaactc 420
ttacgactta atcaacggac gcgcgcgcgc aacacgtgat cgtccctcgt cag 473

<210> 10026
<211> 408
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-031-Q1-E1-C11
<400> 10026

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cgtttcatgt ttcgtcacga gcatcaagat gaagaagtcg gaagaagcat agtccaagct 180
catcggagct agttcaagga gtaatgaagc ccttgatgct gatccgtatt ggaacaaatt 240
gaagcacgaa ctgtgacata tagagcttgt tatactgtag agcttgatgc tcatcggctc 300
atgtgacata ttgtacatct gtagagcttg ttatattgtg atcgcatttg tatgtgctga 360
tgtaacagat tgttgcttct tgttatttga agtattacac ctgtttac 408

<210> 10027
<211> 448
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-031-Q1-E1-C6
<400> 10027

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attaaccag cgaggagcct tggcgctgcc atcatctaca acaaggacca tgcctggaat 120
gaccattgga tcttctgggt gggcccttct gtcggcgctg ccctggcggc cgtctaccac 180
caggtgatca tcagagcgat tcccttcaac aagagcaggt cctaagccgc ctgcctccg 240
ctacaaaaag ctgatcggga ataacgagct tctttgtgat gtcttgtttc gagcgcctag 300
taccgcatcc gccgtcgatt ctctgaaga tggtctctcc tgactgaatc cagacttacg 360

tgtgttaaga ctccagtgtg agtgtgtgac agttgtgtgt gctctcattg tggaagattt 420
aagttataat ttgttgatgt ggcttccc 448

<210> 10028
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-C8

<400> 10028

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aatgagatca atgcagctgc aaggatgagg gtggctgcaa acgagaaggc ggaggctgag 120
aagattgtcc agatcaagcg tgccgagggt gaagcagagg ccaagtacct gtctggcctc 180
ggatatgccc gccagcgcca ggccattgtg gatggcctga gggacagcgt cctgggcttc 240
tcagtcaatg tgcctggcac cactgcaaag gatgtgatgg acatgggtgct gatcaccag 300
tacttcgata ctatgaaaga gattggcgcg tctccaagt cctcggcggt gttcatcccc 360
catggccctg gtgcggtgcg cgacatcgcc acgcagatcc gtgacggtct tcttcaaggc 420
cagtctgcct ctgacaacta gcagtttgct tcgcgggcat gaac 464

<210> 10029
<211> 463
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-D5

<400> 10029

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ttttgatcaa cctcatcctc ataatgccc gcatactcat tctctcctg ggtaccagca 120
gcagcagtag caggagccaa agaagcatca acaacaggga tagcagcacc agaagtttgg 180
ccacctcaa gaggaacacg ctctgctcgt ccatactgat tcgaaagggg cgttggtgtt 240
gttggtgcag caatgcgata ggtgcagccg gcggtggttg tggaaaatgc gcgagcaatt 300
cattgaactt gctatcaagc tatgtttcga acgtcttctc aatgccatct atcttctcca 360
tggcctcgtc aaatctatct agcacatctt gcacctgtcc actcatcatt tgctaaaatt 420

tatcatgtag ttgtttgttc gtcaggttct cccaatcaat ctc

463

<210> 10030

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-D6

<400> 10030

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gcctccaaga tctgcagcta cgcccagggc atgaacatca tcaaggccaa gagcacggag 120

aagggatggg gcctcaacct cggcgagctg gccaggatct ggaagggcgg gtgcatcatc 180

cgcgccagct tcctcgaccg catcaagaag gcctatgaca ggaacggtga gctcgccaac 240

ctcctcatcg accccgagtt cgcgaggag atcatggaca ggcaagccgc atggaggagg 300

gtcgtctgcc tctccatcaa caacggcgtc agcaccctg gcatgtccgc gagtctggcc 360

tactttgact cctac 375

<210> 10031

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-E3

<400> 10031

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ccgagccgag cgcgatccat gctaccccaa caacaactcc tccaacgccg tcaagaccga 180

cgaggcacga cggcgagggc aagcgcgcc accgcaaagg ccacgctact tgcggcgcgt 240

gtaccgacga ggacacgggc tctgccgccc cccacacaca cacatcgcca tcatcatgca 300

tggagaacgt gaagcgaaga cgacgaaaac gaccacacaa ctcaatcgaa ggtatcctgc 360

ggagcaaccc gcgggagtaa ttaaccggga gccttccgaa gccccgggaa ccaggagatc 420

acacaatcgc cacagtc 437

<210> 10032

<211> 430
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-031-Q1-E1-E5

 <400> 10032

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tactcgatgc ctaatctcac agaattctct tgatgaacgc tctcctagtgc tcagtactgc 120
tgtatcttgt ggatgctaac aacgattttc agtacatggg actgttgtcc gggtcgagga 180
aggtttacgc ccagcggacc tagatgtgct ggatgtttta gactgtagaa gacgacgcac 240
cgcgtgctga atgaatgttg ctgagactct agtatcgagc tgtgttgacg acgccgactt 300
gcttgggctc ccgttggtta atttgctacg ctacctattg atagagatgg ttttcttggt 360
gaatttgat cttgctgggg ttgtaatttc atcatgagag gaaatatctg catcagtttt 420
ttgctagtag 430
  
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<210> 10033
 <211> 429
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-031-Q1-E1-E8

 <400> 10033

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agctgcaagg atgaggggtg ctgcaaacga gaaggcggag gctgagaaga ttgtccagat 120
caagcgtgcc gaggggtgaag cagaggccaa gtacctgtct ggcctcggtc tcgcccgcga 180
gcgccaggcc attgtggatg gcctgagggc cagcgtcctg ggcttctcag tcaatgtgcc 240
tggcaccact gcaaaggacg tgatggacat ggtgctgac acccagtact ttgatactat 300
gaaagagatt ggcgcgtcct ccaagtcctc tgcggtgttc atctcccatg gccctgggtc 360
ggtgcgcgac atcgccacgc agatccgtga cgggtcttct caaggccagt ctgcctctga 420
caactagta 429
  
```

<210> 10034
 <211> 448
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-F5

<400> 10034

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tgccgaggac aagcacttgc ccatgtacga tgagttgtcc agcaaggaca atgttgaata  120
tattgctgga ggagccacgc agaactctat cagggttacc caatggatgc ttcaaactcc  180
tggtgcaaca agttacatgg gttgcattgg aaaggacaag tatggtgagg agatgaagag  240
cgccgctaaa gctgcaggag ttactgctca ttactatgag gatgaggctg ctcctacagg  300
cacatgtgct gtctgtgttg ttggtggcga aaggtcattg attgcaaact tatctgctgc  360
gaactgctac aaatctgagc atctaaagag gccagagaac tgggcactag ttgagaaagc  420
gaaatacatc tacattgctg gcttttttc                                     448
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<210> 10035

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-F7

<400> 10035

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aaagcatatg cccttaaccc acaacaatt gtaacaaatt tggctctaga ttcagtcgtc  120
aacttccaaa cccatgcaac aaaacatatc agatccatac tcaattctat agcaacaata  180
gtttaggcgg agtacaatcc aagcaaaaag tgtttaaatt ctagcttcac gggattcctg  240
atggggcaaa atccagacct agttggccga ggccctgttc ctgggggcag cctcggtacc  300
ttctctgaag ttgctcttga acctgcgagg caggtggcgc atgtacctca tccttcagtc  360
gccagtgttc ttgcgcctga tggccttcac actccagttg tacttgcgga tgcgggcggc  420
ggggtagccg caggaggagc aggtgctc                                     448
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<210> 10036

<211> 377

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-G10

<400> 10036

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catctccatg ggccatcaaa cagaggatgt tatcgggttt tgtgtttact tcaatcctgg 180
ccttaacaag atatgtctcc ctaaactcgc gtatgaaggg agactgactg gaaaaggcac 240
tcctggaaga gactcaataa tatgcaggga cggatattct tggctcaag cactactacac 300
agttctacaa aactctacct tggtgacccc gtatgtcgat gaacacaaga acagtctacg 360
ctccaaacac ccggagc 377

<210> 10037

<211> 237

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-G5

<400> 10037

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agcacggcgg caagcctaag ggagttcaac ttagaactcc aaaagagcaa cggccaaacc 180
ttccaactag acaggaacaa cggcgacgca actgtgggca acaatggccg ggtcgaa 237

<210> 10038

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-G6

<400> 10038

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cactggtggc gagaagatga ttcggagacc cgaggaggca gagcaggata cccgcgggct 120
gaggggattt gaagtaattt ccaaaatctc acccggtgggt atttatatcc cgaccctgtc 180
agtgtgaccg agtggaaaca ctcggtggca ccgagattgc agaatcgcaa gtggttgctg 240

caactcgggtg tgaccgaagt gttcaaactcg gttggaccaa tatgtaaacc tagatcaact 300
tagtgatctt ggtttgaccg aaatggatgt ctcggtcaga ccaaaatgca caaagagggt 360
ttggaagttt aagtctatga tgaatcgggg actctgagtg ctcttcacac agagtgggtc 420
aaatctgact tgatcaaact ttgtgatg 448

<210> 10039

<211> 453

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-G8

<400> 10039

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ttgtcaatga aacacttttag taactgcaa caggtgatta gcattttatt catgtgacga 180
caaaaaagga aataacagcc aaagagtaaa ccaagaagaa aaaaatagca aaatcctaac 240
cttgtcctgg ccaccaacat cccaaacagt gaagctgatg ttcttatact ctactgtctc 300
cacgttgaac ccgatgggtg ggatgggtgg gacgatctcg ccgagcttga gcttgtagag 360
gatggtggtc ttcccggcgg cgtcgaggcc gaccatcagg atccgcatct ctttcttggc 420
gaacagcgcc ccgaacagcg tcccgaacga cag 453

<210> 10040

<211> 390

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-G9

<400> 10040

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aaggtgcaga agctcgctct caacatctcc gtcggcgaga gggcgatcg cctcactcga 120
gctgccaaagg tggtggagca gctgagcggg cagtcgccag ttttctccaa ggcgaggtac 180
actgtcaggt ctttcggcat tcgtcgtaat gagaagattg cctgctatgt gacgatcagg 240
ggtgagaagg caatgcagct tctcgagagt gggctgaagg tgaaggagta cgagctcttg 300

aggaggaact tcagtgcacac tggttgcttt gggtttggtta ttcaggagca cattgatctt 360
ggcatgaagt atgacccatc aaccggcatc 390

<210> 10041
<211> 471
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-H5

<400> 10041

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ttggcgacgca cccgacgaag ttgacgggtga ccaagttgta caccctaaac gggccgagat 120
tcaccttcaa gaactccgcc ggcggcgagg ccatgctgga ggtggagtcc cgcattgggt 180
tcatgagcct acgctcacac caattcctcg acgccacatc agcccaaccg gtgatccatc 240
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aaagcgacaa gatcttcgac gccgtgaaca agtcatggta tttcttcctg atggggacca 360
agatcgaagt gttcctccgc aagtcctccg acgagccgaa accagcaggc gtcctcgtcg 420
atggcaactc ctccggcggc atgcagaaac cagcagactt cgtcgtcctt g 471

<210> 10042
<211> 446
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-H7

<400> 10042

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aactggattt atgaagccca agaagtgtca tgagtggttt gagtgcaggc ttcattaagc 180
atctaccaa ctagtctttg gttgtttaca gttttgagat ttgtatcttg ggaaccttgt 240
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atctgatata tggtaatgag ttgcatttca tgttttaaaa agaaaaacag cgacggattg 360
ggcaagcgag tccggcaaga aacacaaatc ccaggggaga taaggccaaa aaaaaaaag 420

cggccgccct aaagggatca agctta

446

<210> 10043

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-A11

<400> 10043

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aagacactta ctgggaagga aattgagatt gatattgagc ccactgacac aatcgacaga 120

atcaaggaac gtgttgagga gaaagagggt attccacctg ttcaacagag gctcatctat 180

gctgggaagc aactcgctga tgacaaaact gctaaggact acaacatcga aggtgggttca 240

gtgctccatc ttgtgcttgc tctgaggggc ggctcagtaga tgcaacctcg acgtggaccg 300

taaaggccat ttctaccaga acttgtttgc agacctagat ctgtgaattt gccggttgat 360

tgaagtgcc tgaattgac gcatttgtga agtcagctgt cacctgtact tggatggaat 420

tgtttgaact atatgcttgc ccg 443

<210> 10044

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-B10

<400> 10044

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ctccatgagg gtgggttttca gcgggcgggt ctctccgggt gttgcgttgg actaggtcgg 180

tgcgaggcgt gcaactttct catgtgaagc tcttcagcaa aatcggagct gtcaagtcct 240

cgacgcttcg gtcgattgtt tggcgtttgc ggccaggctg tctgtgtgtg ccccggtggg 300

gttgtaatct aggtttttcac ccggttttcc gctaattaac cgggcaactc tcttctgctt 360

aatcaatgaa aatggcaaat cttttgcctc gttccaaaaa aagaagtaag aacaaaaaaa 420

aaaaagcggc cgctctagag gatccaagc 449

<210> 10045
 <211> 447
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-B11

<400> 10045

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 catatatggc gattgggctaa acaacatgac atttcataat tcacatatat aatgcattta 120
 taaaaaattg aatatatcat ttgaaatatg ttaaaaaata tatttgaaaa aatgtcagtc 180
 aagcaattga aaaatattaa aatgttatta aaaatgctat tcttttattt gaaaaaaatt 240
 aatgaagcat ttcaaaatat taaaaatatc tatagaaaaa aggttgacca tgcattaact 300
 ttttttatct tgtatatgag aaatgttgat aaaacatttg aaaaatgttt aaatgtatat 360
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<210> 10046
 <211> 434
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-B9

<400> 10046

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 gccacaagcc cgaccgaaag gagttcacca aggtggccat tcggacggcc atcgggttcg 120
 tcgtcatggg ctctgcggg ttcttcgtca agctcatctt catccccatc aacaacatca 180
 tcgtcgggtc cggtgatct cgtctccgca ggtgaggggc cgcaggacga gaggatgggtg 240
 tccattcatg gaggcggcgc tggttttctt atcctcgtac cttaaagcaa ttcatttagg 300
 acttcattgt agaggacagt tcccttggtt tttcatttga aacagttgta ttggtagacc 360
 tggagcagtt ttgaacctga ttccggctag gccgtaatat caagcagtga atgacaagaa 420
 ttgaaaccct aaca 434

<210> 10047

<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-C9

<400> 10047

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aagactgagt gaagataagg ttaggcaatg tgttgactct agacttggag gggactatcc 120
tectaaggct gttgcaaagt ttgcagccgt cgcggcattg tgcgtccaat atgaagccga 180
cttccggcca aacatgagca tcgtcgtcaa ggcgctccag cccctgctga atgcgcgagc 240
agcccacccc ggggctgagc atgccggacg ctaagcacca ctccggcctt ttgtatgata 300
tagataagga aaaatgagcc atcaattggt gttcttgcgg ggcgcgtggc aagcggtttt 360
tgtacatttg tgattattct tccaagttg taaccctcga gattctagta ccagaaatat 420
ttgattcttt gtatcgggtg c 441

<210> 10048
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-D10

<400> 10048

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aacactagtt ctccctgtac ctccaaagag atccattatt tttttgttct ctactttagt 180
taatttcctc tctgaactct tggttgagca cattggattg ggtataaaca tgccaatgta 240
attcagtaca agttctccat gatcaatgag tacggagAAC ctccggaatc ttgcagcttc 300
ataatggaag ctgctccctt tttgcctatt acgtttgaga atcatagcaa ttctagtgat 360
tgtgcattgt aagcataata agaaaagtca tctagcacac agagtgggtac tgaatttgag 420
ataatgcatc gataaa 436

<210> 10049
<211> 439
<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-032-Q1-E1-D11

<400> 10049

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gcggatggta ccaaggagca gaaaacgagt cagacaagca accacgcacg ccgacaaacc  120
tgggggagtt cacttacgac ctcgagaaga gcaacgcccac gaccttccag ctagacagga  180
ccaccgccga cgcgtcggtc gtcaacatgg tccggctcga cttctcctcg aaccacgggc  240
agcctgagct gacgtgcacg taccgcttca ggggtgcatt gagcgagcct ggctctctcg  300
gcactgcggc atcgtgaggg ctgatctagt tagtacctgt gtgcctggga ccatacggtc  360
tttctgtttt agctttgatt gaagacttga agcccctgag agacagtagg ttcaagttga  420
ttctaattctg tancataat                                     439
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<210> 10050

<211> 280

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-032-Q1-E1-D9

<400> 10050

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tcaagaccaa gcgcactatc cagttttgtg actgggtgcc cactggcttc aagtgtggta  120
tcaactacca gccaccaggt gttgtcccag gcggtgacct tgccaaggtc cagagggctg  180
tgtgcatgat ctccaactcc accagtgtcg tcgaggtctt ctncgcatt gaccacaagt  240
ttgacctcat gtacgccaag cgtgccttcg tccaactggta                                     280
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<210> 10051

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-E10

<400> 10051

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 catctccatg ggccatcata cagaggatgt cattgggttt tgtgttgact ttattcctgg 180
 ccttaagaag ataggtctcc ctaaatcgcg gtatgagggg agactgactg gaaaaggcac 240
 gcttgagggg gactcaataa tatgcaggga tggatattct tggctcaag cacactacac 300
 agttctacag aactctacct tggtgacccc gtatgtcgat gaacacaaga atagtctgcg 360
 ctccaaacac ccggagcagt gtgacgattg gattacatgt gaacacatca ggactttcag 420
 cagttggttg gaaacac 437

<210> 10052
 <211> 453
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-032-Q1-E1-E12
 <400> 10052

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 gaaatcatca ccgactaggt cggcgcagtc cacatacaga gtcaaccccc aggccccagg 180
 atggacgaaa aggttgact gaacctgctg atggttggga gacggagcta tctagcctgc 240
 ttggttgctg tgggtcacat ggtgccggac gacttgctgc tgagcacggg ctatctgctg 300
 agtgctcatc ctcctcagat atgagcgatg aaagttgaag aagcgacaca gccgagcctg 360
 cggaaaaatg cagacctata gactgaaact cgatatcacg cttggagcct gcaagatgca 420
 agaactatgg tgttgagggt caccgccgca aca 453

<210> 10053
 <211> 407
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-032-Q1-E1-F10
 <400> 10053

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acccctcagt atcctcttctg gctggaaact gcagacaacg tttgccgtga aaaggagtat 120
 ccttcacaag agagctacgt ccatctgatt cacccttgcg ataattcttc atcacaaagg 180
 atatgtaggc tggattgaga cgcattggata tcccatcttt aactcgcacc agtcctctca 240
 ctgctttctt ccacatgtca acagtgacaa tccaagcctc agcatcgcga tagtcccact 300
 tggagaggag gcanacataa tcgccacaga ggatcggaca agctgtttgc atgtcgtca 360
 taggcaactt tttagctcta gaagatgggt tcaagttctt ggggtggc 407

<210> 10054
 <211> 426
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-032-Q1-E1-F12
 <400> 10054

gtccagaatt cccgggtcga ctgcctagg gtttctggat caaggaggta tttatagagc 60
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 cctgtgcatt cgggtttttt ggtttgattc ggtttgggtc atacggtttt tggtttatac 180
 ggtttttata ctttggttta tatggtttta tacgaagata tgggtccggtt tcggttgcaa 240
 ccgtttgctt tcggtttggc ttccgtaata accatattaa ccaaagttga cgcgaatatt 300
 tgaatggaca cgaaacattt ttggtcacat gatttggtat ctgcatgtag ccatgtacct 360
 aagatttttc ttgtaagaaa tgcctacgga tattagatca ttattagatg gcagtggcac 420
 acatga 426

<210> 10055
 <211> 439
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-032-Q1-E1-G10
 <400> 10055

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 ctctcaagtg agatagatga agattacaca gatacgctaa aggatatcgg attgaaaatt 120
 atagaaaaat gtggttattt accacttgcc gttaaagtaa tgggaggatt attgcgtgaa 180

agaggagggc tacgtcgtga ttgggagcat gttttggatg attctaaatg gtcagtaact 240
 aaaatgcccc cagagatcaa ctatacagta tacttaagct atgaatatat gccttcatat 300
 ttgaagcagt gctttctata ctacactctt cttcctaaaa gtaaacctta taatatggat 360
 caagtagttg caatgtggat gagcgaaggt tttcttcacg gaaactcgag tgatttagaa 420
 gaattgggaa gaaattact 439

<210> 10056
 <211> 448
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-H10

<400> 10056

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 tggaaaatcc ccattggctg ggggttgtaa cgggttatcg gatccaaaac ccgacccgat 180
 agcttaacag cgttctgtta cggtggatgc cacatgtcgg tcacccttga tgaaagcact 240
 tttgtgacgc gcgatttata gtcattggaag tggacacttc tgtgatgata attttggtta 300
 tgtcatggaa cacttctacg acagcacagg tatgactatc ttgattctgt cataaaatcg 360
 tcatggatgt acatgcatga caaaaaatgc gacctactgt gacaaacacg tatcatcacg 420
 gaagtgtatt tttttgtagt gtaatatg 448

<210> 10057
 <211> 434
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-H12

<400> 10057

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 tccatggagg tgcttaaggc aaagtacaac aacttgcgtt acctggatga gtttcagagg 180
 ctctggagaa aagaaagcaa gtggttcttg gagatgaaga ggctcaatgg tggagttcct 240

gtgaagtttg atgggtacat gcgtgagctg gttgacaggg aggtcttcct caagggcaag 300
aagaaggctcg aggtgctcca gtgattgctt ctccaagata aatcggtgga gaacacgtca 360
tgctttttcc aagtgaatcg tgtatagacc gtgtctgaat ttgttgtcag gtttagggta 420
tagatgatcc agtc 434

<210> 10058
<211> 437
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-032-Q1-E1-H9
<400> 10058

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tggattggtg gcatgtggct gcggcgccct cataccggc aggcgtcctg gttgagaagt 120
gcgcccggact gctgggtgcc ccataccggg cagcctcctt ggttgggacc tcaggtctta 180
gatggtaggt ttggaatcga ggtccgtttg gtattacgcc cagactacca gcatccctcc 240
atcaactgga tacgagtatc gatagatgtt gccctagacg gtggctttag tcttagtagt 300
gtctgaattt gtaaggctct gtgtgaatta ttaataaagt ggccacatgc atcggtcaga 360
tgcagaagcc tggggctgtc ctctttttcg aagaatatat atttctttgc atgatcatgt 420
atttgacatc gtatttg 437

<210> 10059
<211> 448
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-044-Q1-E1-A9
<400> 10059

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tttttgcaaa agaaagtga acgtaacttc ttggaaccag aaacagcaca ggacagaaaa 120
cacaattaaa tagcaagttg accatcttta gattgtgagt cgatcaacag ctgtcttaat 180
atcaaagagc tcattctaac acaaacgaac ccataaacca tggctttaag ctacaatccc 240
gataaacaaa atcatcacag tgttcgcaga attcaaacat caacagagag gacagcacc 300

cacgcacgca ttggatctga agacctgttg ggtgctccca cgtgctgaag agtcgcttct 360
 tcactccatg gtagctccag aaccgaaagt gccgccgccg cctccacggc caaatggcct 420
 ggcagcacca ccagcacccc tgaaagct 448

<210> 10060
 <211> 439
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-044-Q1-E1-B10
 <400> 10060

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 caagaatgtg attggagccc gccgtgcctc atggcgcatc atctcctcca ttgaacagaa 120
 ggaggagagc cgtggcaacg aggaccgggt cacactcatc aaggaatacc gtggcaagat 180
 cgaaactgag cttagcaaga tctgtgatgg catcctcaag ctgctcgaaa cccaccttgt 240
 cccgtcttcc actgcccctg agtccaaggt cttttatctt aagatgaagg gtgactacta 300
 caggatatctt gccgaattca agagtgggcc tgagaggaag gatgctgctg agaataccat 360
 ggtggcatgc aaggctgctc aggatattgc tttggctgag ctggctccaa ctcacccgat 420
 taggcttggg ctggcacta 439

<210> 10061
 <211> 241
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-044-Q1-E1-B11
 <400> 10061

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 gtccgaagaa ttgacgtata agtcatgcgc gtaataggac aataacatat catgcctaac 180
 atcgcgatcg acattcgtgc atgataccac atcttctgct gagtcatacg tgtcacgtcc 240
 a 241

<210> 10062
 <211> 410
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-044-Q1-E1-C11

 <400> 10062

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gcttcctcac tcaggctaac ttacgatacg agagacttgg ctgcaggtga gacttatgtt  120
ttcaacttag tcactaactg caattttctac ttcttggcat aagttttttt ccggcgatca  180
acactcattg cgtcttaaca ctgtaagatt ggggaaagtg taaatgcgac tcttactagc  240
atcaagatcc aacccttgac acgggagtat aaatacctca cgtaacagtt tggccgcact  300
aatgatcga tcctgtcatc cgcttgcata ctcaagttata tcacttccat attgcttcag  360
tcgatctctt cacaggctgt cggactacac cttcatgtct gcgaaactcc             410
  
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<210> 10063
 <211> 425
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-044-Q1-E1-D12

 <400> 10063

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agagaggaga gagaggggga gggagagggg tagagtgctg gatgggtgat ggagttgctt  120
ctcgaagatg gtgggagagg cctactagac aaaccgaggg tggaactgca atattatcaa  180
taagagtggg gatgtgtttc tgtgtgtgcc tgtgcgtgat agatctgtcg ggacacatcc  240
atggatgatg aaggggaacc atgtgttttg taagcaaacc taactagatc ggtagatcaa  300
ttgttttttt tgtcggagga acggagagac ataactaatg aggtagatcg atcgacgcgt  360
ggggaaaaac gagttataag gacctagcta gctatatgta tagccggaga tctgtcgggtg  420
tacat                                             425
  
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<210> 10064
 <211> 356
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-E9

<400> 10064

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cggcgctgtc gaagaggagg actccgaggt ccgcctcgca gagcacggcg agctcatgcg 120
ccttcttgag cagccgggcg ctgcgcttgc cgaagggtga ctgcgtggag acgtcgttcg 180
acggtaccaa catctaagtg ggtcgctct ctggcggtcg ctcgagagga tccaggcttg 240
ccttagcttg cagtgcattg cgtacctctg ctggagtgtc atcgtaaata acactgtcgg 300
tccgttggtt tataacttcg tgactggcaa aatgcttccg tttgcagact tagtcg 356

<210> 10065

<211> 434

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-F10

<400> 10065

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cccccaact tcaggttggc gactggagtc agtaagttca ccggagagtc caagcctgac 180
acctggctcg aagactaccg agtggctgtc cagattgggtg gcgacaatga tgaggtggcc 240
atgaaacacc ttcctctgat gttggagtgc tcggctaggg cgtggctaaa tcagttggcg 300
cctggcagta tctatacttg ggaagatcac gcctgagtgt ttgtcagaac gtttgagggt 360
acttgcaagc ggctagcagg tttgacgaa ttacagtgtt gcgtccagaa accgaatgaa 420
actttgagat atta 434

<210> 10066

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-G12

<400> 10066

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aaccacatcg cgcgtgttct tcttgcattg gtatgtgatg gaaaaacaag gaagactttt 180
cacatgccgg ctagattatt atgttggaga aggacatcat tgatcgggtga taaaaacaaa 240
acaaacaagc atgtattctt gaattatatg ttcaggtttg tgtaatttgc tcatgtcttg 300
aatgagctg ggatgataaa atatatgtat tcatgtcatg tttgaaacaa agcagacaag 360
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<210> 10067

<211> 465

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-G9

<400> 10067

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tgctcgggtga gattttacag ttttctgtag tttagatcga gtctgttctt catacctaca 180
gtccacgaaa aagccacaaa aaaaattagg gttagtctcat catatccgaa ccaatctgag 240
cctttgcata atcttttttag ggttttgcct tgttgaattt gcggttgcat cgtcgtgtct 300
agttgctggt cttagagtct agtcttttag agtttcgagt tctggtcata agttgtcacg 360
ccgccgccgc accatcatca tcgccctgc catctaccac caccgcttat ccgccaccgc 420
tccgaatccg tatccatata ccaccaccaa tccgtgtcca tatac 465

<210> 10068

<211> 422

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-H12

<400> 10068

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aattagatcg agtatgttct tcatacctac agtccatgag aaagccacaa aaaaatttag 180

ggtagttca tcataccga accaatctga gcctttgcat aatcttttta gggtttttgc 240
 tttgttgaat ttgcggttgc atcgctgtgt caagttgctg gtcttagagt ctagtctttt 300
 agagtttcga gttctggcca taagttgtca cgccgccgcc gcaccatcat catcgcccat 360
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 gt 422

<210> 10069
 <211> 422
 <212> DNA
 <213> *Triticum aestivum*

<223> Clone ID: LIB31-044-Q1-E1-H9

<400> 10069

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 acggatccac tgttcgtttt ggtccctcac atcaaagtat ccactgccct cgagacaata 240
 gcgtatctct tcatcagtat gcaagtgtc ttcatagaag ttcttcagct tggcctcata 300
 ctttggaac ttctctggac atacatctca aatgtccaca taagagtatc gcctggcctc 360
 acggattttc ttgagattct cgtcattctc ccagtcatca gcattcaggt tccagcttac 420
 aa 422

<210> 10070
 <211> 463
 <212> DNA
 <213> *Triticum aestivum*

<223> Clone ID: LIB31-045-Q1-E1-B12

<400> 10070

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 aatgctgctg atgtgaagag attcaagcaa ctcgactctc aagcgaagaa tatcatatgt 240

ggccatctga gcaaaggaca ctatggcaga gtgagtgcct tggagacagc gaagtttata 300
 tgggacaggt tgtccaaagt gaatgaagga gtctcaactc agcgtgaatc tcgagttgat 360
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<210> 10071
 <211> 465
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-B4

<400> 10071

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 tggttgagca gctgagcggg cagtcgccag ttttctcaa gccgaggtac actgtcaggt 180
 cttttggcat tcgtcgtaat gagaagattg cctgctatgt gacgatcagg ggtgagaagg 240
 caatgcagct tctcgagagt gggctgaagg tgaaggagta cgagctcctg aggaggaact 300
 tcagtgcacac tggttgcttt gggtttggtt ttcaggagca cattgatctt ggcatgaagt 360
 atgacccatc aaccggcatc tacggcatgg acttctttgt tgttctggag cgagctggat 420
 accgtgtctc ctgccggcgc cgatgcaaag ccgtgttggg attca 465

<210> 10072
 <211> 426
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-B5

<400> 10072

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ccggtcatgt acaatagctg tttgggtata ctactctgtt cctttcctag gtagctagcc 360
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 taaaac 426

<210> 10073
 <211> 495
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-045-Q1-E1-B6
 <400> 10073

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 gaggctgaga agattgtcca gatcaagcgt gccgaggggtg aagcagaggc caagtacctg 180
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 ctgggcttct cagtcaatgt gcctggcacc actgcaaagg atgtgatgga catgggtgctg 300
 atcaccagcgt acttcgatac tatgaaagag attggcgcggt cctccaagtc ctcggcgggtg 360
 ttcatcccc atggccctgg tgcggtgcgc gacatcgcca cgagatccg tgacggtctt 420
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 ctgctgggtgg tttgt 495

<210> 10074
 <211> 492
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-045-Q1-E1-B8
 <400> 10074

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 ggctgagaag attgtccaga tcaagcgtgc cgaggggtgaa gcagaggcca agtacctgtc 180
 tggcctcggt atcgcccgcc agcgccaggc cattgtggat ggctgaggg acagcgctct 240
 gggcttctca gtcaatgtgc ctggcaccac tgcaaaggac gtgatggaca tgggtgctgat 300

cacccagtagc ttgataacta tgaaagagat tggcgcgtcc tccaagtcct ctgcgggtgtt 360
catcccccat ggccctgggtg cgggtgcgcga catcgccacg cagatccgtg acggtcttct 420
tcaaggccag tctgcctctg acaactagta gttggcttcg ccggcatgaa cttttaagct 480
ggtggtggtt tg 492

<210> 10075
<211> 445
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-045-Q1-E1-B9
<400> 10075

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cagcatggca gcagaccagt tttttttctt ttcttgcgtg tgtttttctt ttctttttta 120
ttttcttttag tatggatcta tctctctgat caagcaagaa gagatcggca gctccagcga 180
catgacgagc cgtttccggg tttttatgaa gggaactatt tggggtcgcg cggaagcaaa 240
actagctagg gtttattagt gctgctctag ttccgcttgc tattcctttc gcttggtcgt 300
ttgtttcttt aaggatttta ttatcaagggt tgtaaggctg gggatgtgca gctagcttca 360
gattcaagcc tgccgtctcg cctgcttgta cattgtaaaa cagaaccgct gctctccagt 420
gactgaatga ttataagcag ctact 445

<210> 10076
<211> 456
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-045-Q1-E1-C10
<400> 10076

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catctgtcgc aacttcgata tggcacgtgt ttactccagc caatgatgat ttacacgtg 120
ggaaatcccc attggtcggg gctgttactg gggtattgga tccaatatcg gacccgatag 180
cttaacagcg ttctgttaca gtggatgccg cgtgtcgggc acccttgacg aaagcacttc 240
tatgacgcgg gaattatact catggaagtg gccacttccg tgatgataat ttttgtaatg 300

tgatggaaca cttctacgac agcacaagta tgaccatctt gattctgtca taaaatcatc 360
atggatgtac atgcatgaca gaaaacgtga cctactgtga aaaacacgta tcatcacgga 420
agtgtatttt tttatagtgg aaacgtgtgc aatggc 456

<210> 10077
<211> 457
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-045-Q1-E1-C11
<400> 10077

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aacaatgtct ggctcgatga ctagttaagt ctaccttatg atacaagtaa tattattaca 120
acgggttact acaatgggccc ttaagtcgcc tgcagtcctt aagctctcta tgaaccgcca 180
tcttcatact ttgtcttggg attctctctg gtgagtcctc tttgggtaac ccggcccctc 240
ctgggcgggt tacacaaata gttatatccc caacagttgg ggtggttcta catcaccgag 300
ccacgcgatc ccaaattgggc ggcggccccc gaattccgat ctggctttcc cacacggctc 360
acctcctgga aagagacagg cctaacatgg ggggattcag aagagctgac cggacttcaa 420
acctgcgtcc aaaagctggt gaacaagaac ctcaagc 457

<210> 10078
<211> 482
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-045-Q1-E1-C2
<400> 10078

tccgaaattc acgggtcgac ttccaccaa gcgaaatcca tcatctcatc gaaagacggg 60
acacctctgc ctctatcaag tggtatcaga tttccagggt gctcggtgag attttacagt 120
ttttcgctgt ttagatcgag tctgttcttc atacctacag tccacgaaaa agccacaaaa 180
aaaaaatcag ggtagttta tcatatccga accaatctga gcctttgcat aatcttttta 240
gggttttgct ttgttgaatt tgcggttgca tcgtcgggtct agttgctggt tttagagtct 300
agtccttttag agtttcgagt tctggtcata agttgtcacg ccgccgcgcg accatcatca 360

tcgccccctgc catctaccac caccgtttat cgcgccaccgc ttcgaatccg tatccatata 420
ccaccacagc tgtcatatac caccaccgct gccatctacc accatatatc caccaccaat 480
cc 482

<210> 10079
<211> 497
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-045-Q1-E1-C6
<400> 10079

cgccctgccgg taccgggtccg aaattcccgg gtcgacaagg tttgtatgat agtcaagaag 60
cagctggcag tccctgatgg gacccctgtc acagcggagt cgaaattttc tgaacttggg 120
gctgactcac tggatacggg aaatccgcaa ctccccatcc cacagaaatg gcagtagccc 180
aaaagcagcg ccgttcatac gtaacaccga ttgtgttttg caggttgaga ttgtgatggg 240
cctcgaggaa gagttcaaca tcaccgtcga tgaacaagc gcgcaggaca ttgcaaccgt 300
gcaggatgca gcggacctta tcgagaagct tgtgacagag aagacagcgt aagcacctcg 360
gttcattgga cagctttaga aggcaaagg gtcattctgga accgtggact tctgattttt 420
cggtcgcatt tggggcgaga gaaaataatt tatggacagc tttgcattca gtctatgttg 480
tgtgttcatt accattt 497

<210> 10080
<211> 364
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-045-Q1-E1-C7
<400> 10080

gcctgccggg accgggtccg cattcccggg tccacatggg ttgccacatg gccaaagactc 60
agtagagtgt cctgcatgcc attgcgggtgc cagctcagac gtgtctctgc gttgtcgatg 120
ctaacactat gtgtggatgg cgtcgccaga tcacgcctgg attcatgtta gttggacatg 180
aattacattc tgttttccgc atcaactaat agctgtaagg gagttgctaa tcaagtacgc 240
ctctttggat atggcatgag cagagtcgat gaaacaagcg cgcaggacat tgcaaccgtg 300

caggggtgcaa cggaccttat cgagaagctt gtgacaaaac acgacagcgt aagcacctcc 360
gttc 364

<210> 10081
<211> 453
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-045-Q1-E1-C9

<400> 10081

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gggtggccgt ctgtctgggt caggatcgcg acccagtggg caacggcagg tctgttcac 120
tggtccctcg ttgctccct cctgttccca gacagggagt tctagatcga cctgggtacc 180
tgctaagagt gcatcatccg tttggagcac ctacttatcg tatcgaacgt gtttcggctg 240
tgatgatagc taagctgact atctgtatct ggtctgtaat attgtgtgag caaacccatg 300
gcaaggagct ggtgtttgtg tgacgttgtt gagtctgggt tgcataatgt gtgacctaa 360
gcattgttgc cagtatttca acagtgaaga tacgctcttt ggttgatatat aaaaaaant 420
aagtgtnagg aaaacagaaa aagcggccgc tct 453

<210> 10082
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-D1

<400> 10082

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gcctaagttc acctcgtcgg ccggccggat cggaggaaga gcaagaagtg gtttgaccgt 180
gattcattct ttatagtttg cattttgcag gagaagcatc cacattttct ctctcgcca 240
taagaattta gtaaattctc atgtcttgtt aagtttccga tacatgtttg cgccaccccg 300
tctgtagatc ttacttataa tcaaatctc gggcccctgt gctgcctgag gaggtttttc 360

cgttgtatcc catgaacgaa ctttgaacc tgttttgctg aaatcattac agaatccaat 420
gtgtttttta ca 432

<210> 10083
<211> 491
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-D5

<400> 10083

acgcctgccg gtaccggtcc gaaattcccg ggtcgacatc gagccagatg cgcatgtcaa 60
gcaggcgatg aatgagatta atgcagctgc aaggatgagg gtggctgcaa acgagaaggc 120
ggaggctgag aagattgtcc agatcaagcg tgccgagggg gaagcagagg ccaagtacct 180
gtctggcctg ggtatcgccc gccagcgcca ggccattgtg gatggcctga gggacagcgt 240
cctgggcttc tcagtcaatg tgccctggcg cactgcaaag gacgtgatgg acatggtgct 300
gatcaccag tactttgaca ctatgaaaga ggttggcgcg tcctccaagt cctcggcggt 360
gttcatcccc catggccctg gcgcggtgcg cgacatcgcc acgcagatcc gcgacggtct 420
tcttcagggc cagtctgcct ctgacaacta agcactttgc ttcgccggca tgaactttga 480
agctggtggt g 491

<210> 10084
<211> 483
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-D6

<400> 10084

cctgccggtg ccggtccgaa attcccgggt cgacatcgag ccagatgcgc atgtcaagca 60
ggcgatgaat gagattaatg cagctgcaag gatgaggggtg gctgcaaacg agaaggcgga 120
ggctgagaag attgtccaga tcaagcgtgc cgaggggtgaa gcagaggcca agtacctgtc 180
tggcctgggt atcgcccgcc agcgccaggc cattgtggat ggccctgaggg acagcgtcct 240
gggcttctca gtcaatgtgc ctggcaccac tgcaaaggac gtgatggaca tgggtgctgat 300
caccagtac tttgacacta tgaaagaggt tggcgcgctc tocaagtcct cggcggtggt 360

catccccat gccctggcg cggcgcgca catcgccacg cagatccgcg acggtcttct 420
tcaaggccag tctgcctctg agaactaagc actttgcttc gccggcatga actttgaagc 480
tgg 483

<210> 10085
<211> 462
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-045-Q1-E1-D9
<400> 10085

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agaagaggac gttccgcaag ttcagctatc gcggcgtgga tctcgatgcc ctctcgaca 120
tgtccaccga cgaccttgtc cagatgttcc ccgctcgcgc ccgcagaagg ttcaagaggg 180
gtctcaagag gaagcccatg gcgctcgtca agaagctgcg caaggcgaaa aaggacgctc 240
ctgctggtga gaagcctgag ccagtgagga cacatctccg taacatgac attgtccctg 300
agatgattgg cagccttata ggtgtctaca atggcaagac cttcaaccag gttgagatta 360
agcctgagat gattggccat taccttgtag agttctctat ctctacaag ccagtgaagc 420
acggtaggcc cggatcgggt gccacacact cctcccggtt ca 462

<210> 10086
<211> 398
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-045-Q1-E1-E1
<400> 10086

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gttcgattat acttcacca acatacaaca tcactactca tcataacctca tcatgccatt 120
tcggttaciaa tcgtctctat gagtaactag ggacaatctc aggtctaccc actacagaga 180
ctttcctggc ttcttttcag catatgatat aaccattctt atgatattac cagcttcagc 240
attatcaatt gctatggaat ctctactatg cattcatata tctgattata tcaccacttt 300
tcgataacaa gttctacata ttgatgtggt gttataatcg tgtaaacact gcatgatgta 360

tattaatcca gtgttcacaa tgcttgctc caagagca

398

<210> 10087

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-E3

<400> 10087

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aatatacgca tatggcgtga ccgttggtc ccaacgaaac cgacggggta gccgatcacg 180
cggcacggga cttgccgtct tcggcggtc tcagagctcc tggacgagtc cgacgcctgg 240
cgtacgaacg tgctgcgaca gtattttctc ccggcggtatg tcgcgaccat caccagcatt 300
cgcacgtcac cccgcatcac cgacgagtc atcgcatggg ccccgaaaga gaacggcatc 360
ttcacggtc gctctgcata tcgccttgcc atggacgagc gccagcgctc attg 414

<210> 10088

<211> 482

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-E5

<400> 10088

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tgatggaaaa gtcagtagtc gcgcggagcc ctccccaaaa accttatcac cctcctcctg 120
tacagcagca actcagagat tggaaccggt ggcgagagga agaagaagtt ctggtgcacc 180
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agacattagc tcggctcatt ccctcccttt tataggcgcg ggcggcgaag gaggagcgcg 300
cgtggatgtc cctcttggtc tcatgctcat acaagtgagg aaagaacctc cttataaag 360
aggtcaaact ccctctaaac tagcaatgtg ggactaaact ttagttccag ctctttcctt 420
gcacgaatgg cctgcgtggg cctccaagat ttattacgaa atttccgaaa ctgcttattg 480
gg 482

<210> 10089
 <211> 487
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-045-Q1-E1-E7

<400> 10089

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 atgaaagtcg atacttcagc atttgaaatt ttggagagta catagtagca tgacaaagag 120
 taaccgtaca tcatggctgg gttgaaacgt cagaactgga aatccacaag gatttagttc 180
 ggaacaaggg ccatgactag ttttgacgac ataaagctta acctctcagc catgtgttcc 240
 tgtacgacga gttgtctcgc agcgaggcgt catgtggctt gtactccatc agatacgtgt 300
 gcggcagctt caagtgcctc ttaatcgagt ctcttaatgt catcacagcc tgatgggtctg 360
 atgcattccg attccagacg cccaggatgt cttcattgaa acgacaactt agcacgatgc 420
 cacagacatc atcactataa tcaagttgat caccacagag aaccagcacc aaatcctccc 480
 agaaacg 487

<210> 10090
 <211> 375
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-E8

<400> 10090

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 ggagatcgac gacggcgagg tggagatccc cgcttaagaa ggcttggctt tgggcagggt 120
 gttatgtgag gctgctgaag tagtttctcc tatctagatg cttcctgatg cagttgagag 180
 aatggatgtg atatcttcac ttgttctact cgtgctgaag aagaaacttt tgtcatgctt 240
 tagtggttcc attgtgagac tatttttttac tggtttaatg agtaccttgc ggaatcaatc 300
 aatgttatta tggcagctag aatatcaggc gctactgggg gtagcgcgaa gaaaaagcgg 360
 ccgctctaaa ggatc 375

<210> 10091
 <211> 444
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-E9

<400> 10091

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 accgctctcc ttgtccagcg ttcgcctact acctgcagct gctatagcta catttgggca 180
 gtatgcatgc cgttctttta cttcttttgg agaaaacaga aggggtactgg tttgcctaata 240
 gctaagtcca caagtctaac ttccaaagtg gtgcaatttc agtttagtgg aaaggaagac 300
 tcaaattgtg attttttagaa ttggtttatt agataataga aaaaagaatc tcaattacca 360
 tagatataaa ttgacacctt ttccccatta agaggtgtat tttgttgact cgtaatgtcg 420
 catcaagaaa acacaagcac catg 444

<210> 10092
 <211> 372
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-F1

<400> 10092

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 aagtagtgaa cggtgacaag ggagttgtgt acaccacaa ggatcttctt ttgcaatgag 120
 ggtagaggat tcctgctgta gagcaatttt tgtagaataa tcctcttcaa agcccccttc 180
 tctccgtgag aggaatgaag aaagacaaga gagcattgtt gttactatgt cgctatctag 240
 ttccgtgatt attcgtgtac aatgatttat ccatacaatg tcgtagttat ggcactagct 300
 gttgtaactg tagaattgca tcggtacatc tatgccacat atatgaagta cctgtacggt 360
 ttctgatgaa ag 372

<210> 10093
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-F11

<400> 10093

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gacgggacac ctttgccctct atcaagtggg atcagatttc caggttgctc ggtgagattt 120
tacagttttt cgtagtttag atcgagtctg ttcttcatac ctacagtcca cgaaaaagcc 180
acaaaaaaaa attaggggta gttcatcata tccgaaccaa tctgagcctt tgcataatct 240
tttttaggggtt ttgctttggt gaatttgctg ttgcatcgct gtgtctagtt gctgggtctta 300
gagtctagtc ttttagagtt tcgagttctg gtcataagtt gtcacgccgc cgccgcgccca 360
tcatcatcgc ccttgccatc caccactacc gtcggaatc cgtatccata taccagcacc 420
gattcatatc catatacgac cac 443

<210> 10094

<211> 319

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-F4

<400> 10094

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ggctaacgcc cgtagttact gcagtctcca tcctctatcg atggacatga tcgtcgatcc 120
accacgaagc aattggaaat cgatgtgtgg tctaagtgtg ttaacagtag agtatccacc 180
tcggtcctgt ggtagatccc tgtcgcagat ttagcgaata acgacatact gagcaaatg 240
agtgaatcta cactccgggc gtatcgtcta cgatacatcc gtacgtagtc gtccatttga 300
catctctaca ctgcttaaa 319

<210> 10095

<211> 458

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-F7

<400> 10095

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cgcgctgctc agccatccgg catccggcaa gacggcaata cagtatgtag ccatccatgt 120
atcatattcc tgttccatcc ccgattccat ccaaagctaa acttcagcag tttctttgat 180
tcttttagtac gtattcaact attcatccct gatccatcct aattttctgt catgttgtgt 240
acttcctcta tttcaaattt agactagaac catgacgagt aatttggaac ggagggagta 300
catatctagg tttcaatcat ctgatgtata gatttctaata tctttgtatt cgaatttctt 360
cattagttta ggacattagc ctgtcagttt atccaagaca aagcatttac caggtgcata 420
aaagctcggg acggagaaaa aaaggggggg cgctcggg 458

<210> 10096
<211> 454
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-045-Q1-E1-F9
<400> 10096

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gatggtgagg ttagggtttc tcttaatgtg gcgagatttg gtgtcagatg attaagatct 120
acgcaagggt tcaacggcga gaactgcggc tccagggcgt cggtccttag gggcacgtgg 180
acgaagactt cccgactatc atccacaagg tcaagctagc tccaatagga gagcggcaat 240
agcagcgcggt cgatggcttg ttctgacggt agtcagtggc ggagccaacc agctcaagga 300
gtcggacaaa ctctttgcac cctgacgtgg tcagcatttg tccaaggaat taacaatact 360
aatcatggtt gctttgtact agttagtgaa gaatggcaga agcagcccgg gcagctgccc 420
cgggtcgcca ggagctaact ccgccactgg cggt 454

<210> 10097
<211> 467
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-045-Q1-E1-G12
<400> 10097

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gtgcatgacc ttacttgaac tttctcaaaa taatataatt tactttttcg tgaccactaa 120
 ttttaacttct ttttaagcaat tattatgagt agaaaaggca agggcggtact gaaaaaacac 180
 tgcaaattca aaaaatgtcc atcgcatatt taaaaaata ttcttcacat atttaaaata 240
 cccatcatgt tttttataat attcatgtat gcaggaaaat tatattcata tgttgaaaaa 300
 aactatgtaa ctttcaggta agtcaaagga aaaaagtaaa tgtaaaaatt tggatttaaa 360
 atgagtaaaa gtataaaaac ggaatataac attgaaggaa aaagacagaa aaccgaagca 420
 aacataagga aaattgcaaa aacaaaaacg accatctggc gcaatga 467

<210> 10098
 <211> 445
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-045-Q1-E1-G4
 <400> 10098

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 ggaggaaata aggtagatac ggcaatagca gcaagtacgt caagcgctag ggatgtggat 180
 atgggtgtggc ataaagaggt tgatgttctt gctcagtata agccaataat ggagaaactg 240
 atcaagctat ctttcatgat cagttacaca ccaagcctat atttatgcta cttctacatg 300
 ttgctgtgat ggtcattcgg ccatttttct tgaacctgca ctacgatgag agatctgggc 360
 tgcttctttg tggcttccaa acttaaaatg tttgtttgaa agttagttaa gttttttgtt 420
 gtggactcac atcttctcac atgta 445

<210> 10099
 <211> 439
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-045-Q1-E1-G5
 <400> 10099

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gtatggcagc taagacagaa gtgggggtttt ggcgcggttg gttagcgcggt atgtaaactt 180
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 gttgcatgtc tgagtgggtcc catcatttct aagttttcta tgcgacgcca ggctctataa 360
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<210> 10100
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 <213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-G7

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 cttcagactt agccttgccc gttatgtacc aaagctgatg caattttcac tagcgaggct 300
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<210> 10101
 <211> 484
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-G8

<400> 10101

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 gtatgaagga actgcagtga tggaaatttc tgatgacgag gaagaaactg cagcgggtgca 180
 aatcacacaa ccttctgaaa gtgagaacag tcaagcgact tgtgtgcagg aagttgatcg 240

caatcaggat agtcctgctc gccaggaaag agggggcaga taaccttggg acggtgatgg 300
 aggaactgcg acggtgcaag ctagcgatgg cgacaaggaa actgcagctg cttaaagaaa 360
 ctgatggact gaatgattct tctgtccagg ttagattacc tgatcggata gatgggacat 420
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 tttt 484

<210> 10102
 <211> 460
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-G9

<400> 10102

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 tattattgtc tttctaata tccaatcaga aggttggttc gctgggctgg cctattttga 180
 tatacatgcc atggagtggg gtggcgccaa gtaacaagct tgcgtgtgta ctatggtaaa 240
 aagaagtaac aagaatgcc atcagtggcg tataaggcgc caaataggat ttgaggccgc 300
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<210> 10103
 <211> 381
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-H5

<400> 10103

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 tagattagat cgagtctggt cttcatacct acagtccacg aaaaagccac aaaaattttt 180
 tagggtagt tcatcatatc cgaaccaatc tgagcctttg cataatcttt ttagggtttt 240

tgctttgttg aatttgcggt tgcacgctcg tgtcaagttg ctggtcttag agtcgagtct 300
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<210> 10104
 <211> 410
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-A5

<400> 10104

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 cctttacttg cttaaatacc ttcacgagg tgatttttagc aagcggttgg cctcattgta 180
 ggatgaatat gattcttcac cttactatg gttgtcatgc atattcataa tcatcatgca 240
 tattcttcat ttagagatca ttaatgactg acgtatTTTT taaataagcg gggcccagta 300
 ggggtgtgctt ggaaatatTT gagaaaccac catgcacgtt catctttgct gcatgcaaat 360
 cgggcgggag ccgcagtgcc agcagctgtc aacgccttaa tgaatccacc 410

<210> 10105
 <211> 468
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-B10

<400> 10105

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 gccgggtttt accatgttta ttttttctt tttactttat ttttggtttt ttctttttct 180
 tcacttttgc agtctaattc aacatgcttc ttctgtgtct ttttttactc ggttttctca 240
 tgcttttccc aaaataattt cggttaacaa acgcagaaaa tgttgaataa gcattaaaaa 300
 tgggtgaacga gtattgaaaa tttgttgaat aagtacgaaa aatgttgaac aagtatttta 360
 aattttttga ataagtattt gaaaatggtg tacaagtatt aaaaatgtgg aacaagtatt 420

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468

<210> 10106

<211> 373

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-B12

<400> 10106

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ctccatgcag actgcttcaa tgatgatttt gttggagtac cttttccaga taccgatatg 120

gatttgagat atatacctag aaaggacca aagtggcagt cacgacatga caatgatcat 180

gaatctgaga gtgcttccag agcattccag tcttgctgag cttgactcag atacaacata 240

tatagtttaa cttagtgatg catatagagc agaatgtgat gctatgcatt atgctatctg 300

aaacattcaa gaggtcagtc aagcctatgc caattgagct caattcatcg ttaatcgtga 360

cttaatgttc etc 373

<210> 10107

<211> 360

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-B6

<400> 10107

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taaagatatc aaattttcac ggatgggtacg cggacactgc tagcttgtca tatataaata 180

catatcctgt atctatggta attcttataa gctgcaagtt aagcgtttcc actggtgttg 240

tttgctaatt ctttttcttc aaatcttttt tcatctcttg tgtagagttg gacttctaca 300

ttttttttgc aatttttcca cttggcccag agacattgta ttatttttat tagttttgtg 360

<210> 10108

<211> 466

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-B9

<400> 10108

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agactgatgc cacttgggcg cagatccttc gtagcaagta tcttcattcc aaaactttgt 180
cccaggtgag agcaaggctg tctgactcgc ccttttggaa agggcttatg aaagtcaaag 240
taaccttgtt taataggaca aggtttctta ttggcaacgg agctagcacg cgattttggg 300
aggatacttg gtcgggagag accccccttg cgattcaata cccgtcgcta tatcgattg 360
ttcaacggcg tgaggttttc gttgcaacgg tacttcaatc cactccactt aatatgcagt 420
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<210> 10109

<211> 473

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-C11

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acaatcgtga agatgtaccc tgggttcagc tgatctggga aacgcactac ccgaacaagg 180
tgccgcacac cgccgagcca gtgggttcct tctggtggaag agatgtaatg cagctcagt 240
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catatgctct gaatgaggat gattcgggtg ccaagatcct caaatccact gatcctgcct 420
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<210> 10110

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-C12

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gtttgctctc atgtgtgttg ccgaagggtg tgggcaggaa tatttgcaga agtcaaacgc 180

aactgatgct tcagggaaaca tggttctcag tgatatcggg gtgcaccttc aacagaagat 240

caagtctcat ttcagagaga taaacgtcca ctctgatgtg aagtacatcg accctacata 300

catgctccgc gccgtgcgtg ccaatgcata tgatgccatc ctgtgcacgg tgctcgggtca 360

gaatgctgtt catgggcgct ttgcagggtt cagcggcatc acagccggaa tatgcaacac 420

acataacgtg ttcttgccaa tacctg 446

<210> 10111

<211> 422

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-C4

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ccttgctcag atgttccccg ctcgcgccccg cagaagggtc aagaggggtc tcaagaggaa 180

gcccattggc ctcgtcaaga agctgcgtaa ggcgaaaaag gatgctcctg ctggtgagaa 240

gcctgagcca gtgaggacac atctccgcaa catgatcatt gtccctgaga tgattggcag 300

ccttatcggg gtctacaatg gcaagacctt caaccagggt gagattaagc ctgagatgat 360

tggccattac cttgcagagt tctctatctc ctacaagcca gtgaagcacg gtaggcccgg 420

ta 422

<210> 10112

<211> 469

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-C6

<400> 10112

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 tcttcctgag gcaggtgatg gcggtgggtg gacaatgcag cagcacaata tatctacagt 180
 tttccgttgc cgtgatggtg tcgtagctaa agcaagcata acatatctgc cctgtgaggt 240
 ttttggacct taggtcgagt tgagtcgtag tgttattact gagtggtatt tgcttcgtat 300
 gaaatgagac aatgtgggtg gattcctgtt gctattctct ttctctgccg tcttcacgc 360
 agctacctac ttgtgtgtgc tcgcctactt tctcccttaa cagatgcatg gacgctggag 420
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<210> 10113
 <211> 432
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-C7

<400> 10113

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 gaatggctat ggaaatgcc aataggttag gtatgggtggc tgtttaggta tatgggtgggt 180
 gtatgatacc ggcgaaaggt gcacgggtatt agagaggcta gcaaaggtgg aagggtgaga 240
 gtgcgtataa tccatggact caacattagt cataaagaac tcatatactt attgcaaaaa 300
 tctacaagtt atcaaagcaa agtattacgc gcatgctcct aggggggataa attggttagga 360
 aaagaccatc gctcgtcccc ggccgccact cataaggaag acaatcagaa aatacatcat 420
 gctccgactt ca 432

<210> 10114
 <211> 462
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-C9

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gaatcaagag tagatagtaa gcgcctttat tatggtcgtt tcattctgtc cccgcttaga 240
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ggaacatgta tcacacgtgc aaaatttggg agcgtgccgc acgaatattc tacaatagca 360
ggattgaag aatccgtaca agaaatttta ctaaatttga aagaaattgt attgagaagt 420
aatctctatg gagttagaga cgcattccatt tgcgtcaaac gt 462

<210> 10115

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-D1

<400> 10115

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ccacctagaa tggaagatat agacaaccct aattgacaca tgagctatct gagcatacaa 360
aacagaattt catttgaagg tttagagttt ggcacatata acatatactt ggaac 415

<210> 10116

<211> 463

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-D11

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catgaacggg ataaaaggga actgggtgcc tttgggtgcaa atgcacacca tgcaagattg 180

gctacattat ttttcaatat ttccctaacc gaatttccaa tagtttatgc atgaagtttt 240
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atgtatgtca aaatccattt aaatttcaca gctgtattgt tctatgatct gtccaaatgg 360
atttaaaaga taaggaatat tacaagtaga tatatatgca taacttcaga aactgaagac 420
atctttattg ccttaattag cttactggcc gatggaaaat tgt 463

<210> 10117
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-D3

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ttctacctga tggctctgag gtgacccctt ccggcaggag gaagttcttc tactcatttg 360
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<210> 10118
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-D5

<400> 10118

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<210> 10119

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-D6

<400> 10119

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<210> 10120

<211> 468

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-D9

<400> 10120

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<210> 10121
 <211> 453
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-046-Q1-E1-E10
 <400> 10121

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<210> 10122
 <211> 414
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-046-Q1-E1-E3
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 aatccaacga taatcatgcc acgtcacccc gggtactatt gataatctac cgttagtcca 240
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 aactaaaatg ttcgggctat gccaaaaatg gcatacgtaa ttatagtgca gcaaacatat 360

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<210> 10123

<211> 362

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-F1

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ttccccgat ttattcagta ccttgagggt cgggagttgc atcttgcaag tcaagtgaga 240
tgtaaatgta aattgttgga tcacatcaca gaaaaatact cctacgtagt atataaatat 300
aatgtatgc aagtatgtat tagctgcatt aatgtgagac gaacacttga aggtgacttg 360
ag 362

<210> 10124

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-F10

<400> 10124

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ctcccgctct gggcctttct ttatctgttt ttttatgtct gagttgtttg tttgtttgta 180
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<210> 10125

<211> 225

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-F3

<400> 10125

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tccaggcaat aggctgaaga acttcttgcc agcttttgag ttaaccaatg agcttgtaac  180
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<210> 10126

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-F4

<400> 10126

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tactttcccg agtaagtcct cccctcaacc gccccgtaac atatgaattc ctagatttcg  180
atcgtttttc ttttaacatt ccgtgttttc tgcagtgaca cacattccac gctcatcctc  240
ctaagcccca aatattccat ggccacgtat ttcgaccggg accgtcagtc gaacgtagac  300
tacacaaatg tcaagaaggt tcttgatgat gttctccccg gctacgtcaa atctggaggc  360
accttcacca ggcctattcg taagtacggc aagcacgtgt tctcgacaaa tacga          415
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<210> 10127

<211> 274

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-F8

<400> 10127

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tccttctgac gatgtgatgg gggaagatgg taacgataga tactagaccg tgcgcaggca  120
ctacacattc cggcatgcct acacccaatg gccgttatgc cactacctta catcgtgtct  180
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gttacgccgc atacggtaag tctatatact tacacgtcta ttgcatttgt tgcgccagaa 240
aggcatttca ggttgatcgg cataactcagg ttg 274

<210> 10128
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-G1

<400> 10128

acgcctgtcg gtacggctcc gtaaattcca gggtcgacgg gactgtccat gtttcaaggg 60
cgcaaccgag ggtccttggg atcgaccaag tgaaatccct gcgtgaacgg cttgatacct 120
gggtcgggaa ggtgcacact actttgctgt ctgtcgaagc cgaaacacc gacctggtag 180
cttcgtgatg ttcttttggg cccctgttga acgatggctg tgaccttaca caaagtgaac 240
agatggattt gaaatttgta ttgagtccta cgctgcaatc tcgcaaaacc tagagagatt 300
tgtgtgtaaa catgacgac agtcttggtt tgttttgacg tggaactcaa tgtatgcgca 360
acggctcttt cctgacgcac caaagtgaag tgaaatcggg gtccctgtttg cgt 413

<210> 10129
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-G3

<400> 10129

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gaggaggtat catcgagcca tccctgcagg cgcttgcccg caagtacaac caggagaaga 120
tgatctgccg caaatgctat gcgcgcctgc accctagggc tgtcaactgc cgcaagaaga 180
agtgtggcca cagcaaccag ctgaggccca agaagaagat caagaactag agtgccacta 240
gtcagtttca tgggccggtt gaatccatcg cgtgtcggag tttatgctat tatcgtctcg 300
tttgtcgttg aaccttattt tactttgctt tcagcctcgt atcgttgtgg tgataattga 360
cagtattggt atatggtagc agacctataa ttttgccgt 399

<210> 10130

<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-G5

<400> 10130

cgccctgccgg tatacgggtcc agaattcccc ggctcgacaaa ggaactgatg gcttgtattt 60
cagtgatcta ctgttggtt accatttgtt tttatagagg gtcgtgcaac ttgattgaag 120
atgggaagat gatgagaacc gcctgatgaa gaagctgctg agaaccagcg ccggcgctctc 180
ccagccagcg cctgtgaatg gaattgacgg ccagccagtt ttattagcga tggggcctgt 240
atataagcaa tgaaaaaggc gcgagggcga gcagcaaac gcagaactgg cgccagaaaa 300
gttgttgaga agcgagtggg cgggaaaaag ttgttgcaat cacgcatata gcagacgcgt 360
ttgtgaaaaa acggataaag ctcgttttt 389

<210> 10131
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-G7

<400> 10131

gcctgcaggt aacgggtcta aattccccgg tcgacttcca acaacgagat attcatcatc 60
tcatcgaaag acgggacacc tttgcctcta tcaagtggta tcagatttcc aggttgctcg 120
gtgagatttt acagtttttc gtagtttaga tcgagtctgt tcttcatacc tacagtccac 180
gaaggagcca caagaagcaa attagggta gttcatcata tccgagccaa tctgagcctt 240
tgcacaatct ttttaggggt tttgctttgt tgaacttgca gttgcatcgt cgtgtcaagt 300
tgctggtctt agagtctagt ctttagagt ttcgagttcg ggtcataagt tgtcacgccg 360
c 361

<210> 10132
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-G8

<400> 10132

attccccgggt cgacgaatgc gctggagcat gggcgagag tgggggcttc gccgcggcaa 60
gcgccttgcc gcggtcattg tcttgctgca cccgaaagct tgctgctcgt cgggtcttgc 120
cgggacgcgc ggcgcgtcgc ggcaagtctt ttgaaatgcc ttggttggtc ttccccggcaa 180
gctcctcttg cgggggcctt gtccttcccg gcaagctcct cttgccagag tcttgctctt 240
tcagtgaata cactttgttc ttgaatggca tcaatacag ctacggagga tcttggggga 300
cgccccggcaa gccctgccac tgggtgctgc gactgcccgt gcacaagttc gggatactaa 360
ggtacccta ctttagtaca ccgacagt 389

<210> 10133

<211> 432

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-H1

<400> 10133

acgcctgccg gtaccgggtcc gaaattcccg ggtcgacttt ttttttttat tttttttttt 60
tttagcccc tcgctccctc tccacacccc tgagctcgt cccgaccca tggagctgca 120
caccgacgca tgcgaccaga ggaggcccca gtcgacggaa gaaatgtttc caccacagag 180
aaggcagatg tgggcgcgac gtattgcct gtcacagacg gcttcatttg ctgtcagttc 240
ccacggaata cggcctatat ttatggctaa acagcagcac tacgccgtct cagcagacg 300
caggcggaag cacatcggcg cacaggacta gcatgcagtg taccgtgcag gttaaataaa 360
ggaccctctc cccacaaaa aagcaaaggg caggaggaa aaaaaagcgg gcctctaaag 420
gatccaagct ta 432

<210> 10134

<211> 249

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-A10

<400> 10134

tccccggctg acgagacaca tatgaacaat cttcatcatc aagtgcagc aacccttgca 60

caagatcgcc atgcaggcca acgacgccag atgaaaaccg acccatgagc ttatcagccg 120
 ttgcaagttt ctactcatta gtaaatacaca caatacacga tatcataaga gagctaacag 180
 atatagacgg tatcgattct accgtaaaca tgtgaatgca tcagagagta tcatccaatt 240
 agtatacac 249

<210> 10135
 <211> 413
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-047-Q1-E1-B11
 <400> 10135

cgctgcggg taccggctct agattcccgg gtcgaccctt tctacatgcg tgccaagatc 60
 ttgggcagcg ctggggaccg gcaagtcgcg agttottacc tcgaaggcgt cattctggca 120
 aaccaagata aggataactt cctcgtgcct tactttcccg agtaagtcct cccctcaacc 180
 ggcccataac atatgaattc ttacatttcg atcggttttc ttttaacatt ccatgttttc 240
 tgcagtgaca caogttgcac gtcctcctc ctaagcccca aatattccat ggccacgtat 300
 ttcgaccggg accgttagtc gaacatagac tacacaaatg tcaagaaggc tcttgatgat 360
 gttctccccg gctacgcaa atctggaggc accttcacca ggctagtca taa 413

<210> 10136
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-047-Q1-E1-B9
 <400> 10136

ggtcgaaat tcccgggtcg actagaaatt ttgatcggtg gaagactcca tgatatctgc 60
 tccagcttcg tcttcgtaat catcatcact actgtcgggg tgggagtcgg tgctcgtgat 120
 gatgatgtag tcttcagaac ggatgtcctc ctcagggtg ggatctccca tgaatacttc 180
 tagcttcttc ttcaggctct cattcttctc cagtaatact acaatttcct cctcatatcc 240
 atcgcggtga gacttggtt cctcttcaag ctccatgttc ctggatcatca ccttcagatc 300
 tatcatgcg gcgcacattt ggttctcctg gcgacgaatg tgctggttta actcctggat 360

gaaggctgca atggacttgt cctccgggt gctgatcatc tccattgct catctcggcg 420
cccacatatc agatagatag tgtcctt 447

<210> 10137
<211> 465
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-047-Q1-E1-C10

<400> 10137

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cgcaacctcc tctctgttgc atacaagaat gtgattggag cccgccgtgt ctcatggcgc 120
accatctcct ccattgagca gaaggaggag agccgtggca atgaggaccg ggtcacgctc 180
atcaaggaat accgtggcaa gatcgaaact gagcttagca agatctgtga tggcatcctc 240
aagctgctcg aaaccacact tgtcccgtcc tccactgcc ctgagtccaa ggtcttctat 300
cttaagatga agggtgacta ctacaggtat cttgcggaat tcaagagtgg gcctgagagg 360
aaggatgctg ctgagaatac catggtggca tacaaggctg ctcangatat tgctttggct 420
gagctggctc caactcatcc gattaggctt gggctggcac taaac 465

<210> 10138
<211> 353
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-C12

<400> 10138

cctgccggtg cgggtccgaa cttcccgggt cgacttgccc gtcctcccga tcatectgtt 60
tggatgttgg ttcgatgggg tcttcttgggt cttcggcggtt ttcgagagta tcattgtctc 120
atgtgccggt attgctgtcc tttccgcgac gcgatttaga gcggcgccga ttacatcgac 180
gcttttgggtg tatctcacga ggtttgtcct cgtctggacc attctcatca tcgccgtcgc 240
attctttaag tgtgcccacc atctacacat cgtatgatga attggccgctc cagcgtccgg 300
taaagtgtgg gttttggggc tgctcctctc tggcatcgctc gtccatacca tcg 353

<210> 10139
 <211> 387
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-047-Q1-E1-D10

 <400> 10139

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ccgggtcgac cggatgctca gaagacgaca gaaggggggt gccattgctg tgggagctcc 60
agctgctgca tctggtggtg ccgcagcacc tgctgctgag tcattgacgg aggagaaggt 120
tgatcagaac gaacaatctg atgaacacat gggtttcagt ctgttcgact aagcgcttca 180
gttccacccc cctaccctct gtttacccta gtatctgtcg tgtgtggcct gccacatcag 240
cgctgcata atatctagag acctgaagtt cgtgctatct tgcattgggac aatgtatatg 300
tttactacct tcgtatgtga atgtgttact gcttccatag ccttgagaag ttgaatgata 360
catcgctgga gttatgtctc tcgcaaa 387
  
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<210> 10140
 <211> 370
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-047-Q1-E1-E11

 <400> 10140

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aattcccggtg tcgacgacaa gggggacacc gaggggggtga tcacgctgag ggacataatc 60
tccaagctgg tgcacgagcc acggcattac tttggggatt tcttcgacgg cgtcgttccc 120
ctaccacaaa acagtaccgt atgacaaact ctgtactact atgtacaaca aaatgtacat 180
tatctttttg ctcattccca atcttcttct caagttgggg ttggggatgc tgttgctgtg 240
gagagacctc tgtggggacg actaatgaac caatgggggtg gatgacagtg tgcgttgaat 300
aatctgagaa ttgcctgagc tttgcgatga gaaccgtctg aagaatttca caacaaaaaa 360
gcgggcgctc 370
  
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<210> 10141
 <211> 423
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-047-Q1-E1-E12

<400> 10141

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ggacaccttt gcctctatca agtggtatca gatttccagg ttgctcgggtg agattttaca 120
gtttttcgta gtttagatcg agtctgttct tcatacctat agtccacgaa aaagccagga 180
aaaaattagg gttagtcat cccatccgga gcaatctgag ccttgcataa tcttttcgggt 240
atttgctttg ttgaatttgc ggttgcacg tcgtgttcag ttgctggtct tagcgtctag 300
tcttttagag tttcgagttc tgttcacaag ttgtcacgcc gtcggtgcac catcatcatc 360
gcccctgcc tctaccacca gcgctctgaa tccgtatcca tataccacca gcaatccgtg 420
gtc 423

<210> 10142

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-E9

<400> 10142

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ccgcaacaca cagacacaca ccgtacacca tgactgtgcc acacgtacat acatgcaagc 120
atacctgttc gaccagcgggt acatggctgt ccgcatgtgg agagtaccga cgaggataag 180
cgcgttccag acggtcatcg atgtcgatgt ccgccgtacg ctgaccggca ggccttaagt 240
ctccgtgctg actgtaccta agctgggtcg tcgtcgtaca cgacacgtcg atcatttcat 300
acgtgctgta gaaacaacgc atactgttca accgtggaga caatgtcgat cgggatctgg 360
atggatgtgc actgtggcga acaaccaacc agactgcac tttctgatgg ccgtatgcat 420
ctttctgatg 430

<210> 10143

<211> 322

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-F10

<400> 10143

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gtcatccacg tcgcattgct gtgcacggtc gagcacagca tgcagcgctc gacgatgcgg 120
gaggtcgtgc agatcctcag tgagctccca gggccagctg gtaatcaacg tgacgaagat 180
gagcttcacc tcgccggcta acgccctgag tccaaccctc ctgcctcaga tattttctaca 240
gaaacaccaa ctggcaatcc gatagatcag caaccgcagc agcagcacac tagctcggag 300
tcgtcgcttc atcctgatct ca 322

<210> 10144
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-F9

<400> 10144

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ttggaagtaa ggaagcaaac ccggttgtag tgcgtgaact ttgctggaga gaagcaacat 180
ttgctgccat gtctgcggag gggatcctt ccgattctgc ggcatacgca gaccgaatc 240
ttgtcgcccc caagctgccc gtggtgatgc agaagacca gaagctgaag ataccagtt 300
aacctgctaa gacacctcta ccgtgtgttc ggtacatcca tgagtgggtca accgtgggtca 360
caactctatt tgcattgtgt gtagatgtga gctatcggtg ctttaccat ttatcttgag 420
gcccttgcca ctggcaagta atg 443

<210> 10145
<211> 375
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-A12

<400> 10145

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cgtaagaat acagcattcc tcaaatcatt ccgtcagagg gttcaaacg ggatcctggc 120
gctacattat gcgaggcagt ggatggggac aaagctacag agaactctat cgctggatat 180

gagatcaacc agtccaggat gattcttttt tatgaagttt tgggattagc caagaacatc 240
 tgggaactcc ctgcaaaatt caagatttgc cacttgatt gttgacaggt gggccaagaa 300
 atttggcaag attatcgcta tcaacaattc aacatggaca caatcaaca atccgaaagg 360
 ggggggggca tctgc 375

<210> 10146
 <211> 422
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-001-Q1-E1-A3
 <400> 10146

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 gcgtgccgag ggtgaagcag aggccaagta cctgtctggc ctcggtatcg cccgccagcg 180
 ccaggccatt gtggatggcc tgagggacag cgtcctgggc ttctcagtca atgtgcctgg 240
 caccactgca aaggatgtga tggacatggt gctgatcacc cagtacttcg atactatgaa 300
 agagattggc gcgtcctcca agtcctcggc ggtgttcac ccccatggcc ctggtgcggt 360
 gcgcgacatc gccacgcaga ttcgtggacg tcttcttcaa gggcagtcctg cctctgacaa 420
 ct 422

<210> 10147
 <211> 170
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-001-Q1-E1-A4
 <400> 10147

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 atctcctgcg acgacatcgc cttgcagatt ctggaggatg ttgacaacgt cgccgcatga 120
 gaggcctccc ggctcgatgt gatagacacc aggagcgaat gccgggtctg 170

<210> 10148
 <211> 432

<212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-001-Q1-E1-A5

<400> 10148

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aattcccggg cgcacatgat atgcaccgga tttaggtccg gagcggctgc aggggtggtg 60
tcccgaaatac tgtccgacaa cagatttaag tcatgtcat cgcggctgtt cggcactcct 120
gatgtggggcc cgaatccgtt gaagatcaag tctccgcgga tatcgttcgt gtaattcaag 180
tttccaaacc tgacctaata ggcaggggag tagctgtcga tctactccag atggccaagc 240
gaattggccc gcagtgcgaa gccgccgaac acgaaaatct gtccggggag aaaagtctca 300
ccctagaccg cattgttgaa gattgaagg gcatcaagc cttatagcaa tgacacagag 360
gaactctcaa tgaaagcacc aatgtcgggtg tcaaaaacgg cggatcttgg gtanggggtc 420
ccgaactgtg cg 432
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<210> 10149
 <211> 401
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-A6

<400> 10149

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ccggttttga caccacggcg tggagcttca tttccgactg aggggtagaa gggggatttc 60
gcggtgtctgg gctgcgggag cgatttcgga tgaggaggga gttctcgcgc gcgtccaaat 120
tttgggataa caaggcgcca cgcgggttga agaagcggga gtttcaaagc aggtgagaca 180
aaagatactc gagcttgaaa atttcgggat aacaagggtc ggattccttg ttcggcagaa 240
caaacttaac gtgtaaaaaa aatcatacaa gacacaagag agtcatgtcc ccctttacta 300
tattgctata gatgccattg aaaaaactac aagaaaaatg taaaaaaaaa ttgggagaac 360
atgattaacc tgcacagtac caaatccaat ccacttccc c 401
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<210> 10150
 <211> 403
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-B1

<400> 10150

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ttaaaacagt tcatgacatt tgaaagaaag tccagaaact tcaaaaaagt tcatgaagtt 120
gaaaaagtta attgattttg aaaaaaatcc aacacaacta aaagaaataa ttcattcaatt 180
ttgaaaaaaa gtaagttcat ctgttttgga aaaaattaaa tcaaaaatga agaaagagtt 240
catcgatttt gaaaaatggt catcgaattt ggaaaaagtt tatcgatttt gaaaaaagag 300
tgtgtctata gtgaaaaaag ttcacgcggt tttaaaaaat tagttgattt aagaaaagaa 360
ttcaatcggg tttttaaaaa attagttgat tttaagaaaa gag 403

<210> 10151

<211> 353

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-B2

<400> 10151

ccgggcgagg cagacgacag aagggaagcc tactggcaa gaccatcacc ctggagggtg 60
agtcctcaga caccattgac aatgtgaagg ccaagatcca ggacgaggag ggcattcccc 120
cggaccagca ggggcgcatc ctgcgcgga agcagcttga ggatggccgc acccttgagg 180
gctacaacat ccagaaggag tccacccttc acttggtgct ccgcctgcgt ggtggccagt 240
aagtcctgg cgatggatct ctgattctgt cttcgggtgc cttcaatgga gtctcgtctt 300
gtgcctatca ttgcctgatt tggccttggt tctgtaccgt gactgtgatg cag 353

<210> 10152

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-B3

<400> 10152

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tgggttcttt atgactaatg ttgagttcat ggattatag cactctcacc cttocagcag 120

tgctagcctc tcttgtgccg cacaactttc gccggtacca taaaccocatc atttatcttc 180
 ctcagaacag ccaccatacc tacctattat ggcattttcca tagccattcc gagatatatt 240
 gccatgcaac tttccaccgt tccgtttatt atgacaggct tcatcatact catattgctt 300
 tgcataatca agtagttgac atcgtatttg tgtcatggcc tccattcata attttttata 360
 catgtcactc ttgattcatt gcacatcccg atacaaggct gggagcattc acagagcgtc 420
 catattttgt ttcaa 435

<210> 10153
 <211> 307
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-B4

<400> 10153

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 tcactgaata tgatatgttt gattccttgc aatagttttg cgatataaag gtgggtgatat 120
 tagagtgtg ctagttgagt aattgtgaaa ttgatcatta cttgtgttga ggtttacaag 180
 tcacgtagca tgcacgtatg gtgaaccatt atgtaacgaa gttggcgcat gaggtgctct 240
 ttgattgctt tccttatgaa tggcagtcga agacaagcga tgggtcttttc ctaccaatct 300
 atccctc 307

<210> 10154
 <211> 404
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-001-Q1-E1-B5

<400> 10154

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 aataagaaag gaattcaagt gcagctcaac ctgaagagca atggcaacgg gtcgagcgca 120
 aagaaggcgc cagcagcaag atcaaaagct cctgggtctg cagggaaggc tgtcggaggc 180
 tcaggcggga agcgggaagag gtagectacc gccgccgcac aatgatgact ggctggaage 240
 aacagacccc agatagttgg tggctcgtg tttggtttct cctgttacct cagttgttcn 300

catttgtagg gaaaacctgt ttgcttgacac ttcatttgct cttgtgtttc tcgccgctgc 360
 cggaggggct tgtttagcgt gtgagctttt tctcctgacg caat 404

<210> 10155
 <211> 377
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-B8

<400> 10155

gagactttca agccggcgat agaacaagat atgggcagtg ctgaggaggc gtatgccggg 60
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 tcagcagatg caaccatacc ggggggtacg tcctttggcg cgatgagcaa tgccatccag 180
 gccattctcg cgagcgatga tggaaagata acaaacaagg atctcgatcat gaaagcgcgt 240
 gcagcgtgt ccaagcaagg atacactcag cagcctgggc tctactgcag tgatgagcat 300
 gttcatgtgg ctttcatctg ctgaaacatg gattgatgtt gtgctttttt ttcctttctg 360
 tgatgagctg tgcacga 377

<210> 10156
 <211> 346
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-B9

<400> 10156

gactcactca gaatatcgga gaggtatctc taagccctct cggtaatata catcataaga 60
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 aagagacttg ccggtaacga gattgaacta ggtatgaaga ttaccgacga tcaaactctg 180
 ggtaagtaac ataccgatta acaaagggaa ttatgtatgt tgcataaagg ttgcaccgat 240
 agagatcttc gtagaatatg taggagccaa tatgggaatt atgtatgttg tcataaagg 300
 acgctatttg ttattgaccg gagaggtgtc tcagtcatgt ctacat 346

<210> 10157
 <211> 358

<212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB31-001-Q1-E1-C1
 <400> 10157
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 attcaggcca agaaggttaa caccctcatc aggctgatg gcaagaagaa ggcgtacgtg 120
 aagctgacac cagactacga tgctcttgat gtggccaaca agatcggcat catataagtc 180
 agagggaggg tcctgcagta ggcgcttggtg tcgtggtttc ttgtgttatt ggaattttgt 240
 agttgttact tagcaaagg gctcagtggc tccattgcct accatatcgc tgcacacttt 300
 catgaatttg atgcaatcga agtgacttgt tgttgagctt tgcgtttggt cttaaaaa 358

<210> 10158
 <211> 366
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB31-001-Q1-E1-C2
 <400> 10158
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 gtcgatcctt ggggtggtaga gcacaagacc tttattaaga aggcgtacaa tgaccgatgc 120
 caagcagagg acggacgttc tgctgcgtca agcagccacc tggcggtcag aagggtgcct 180
 actacgccat ccatcacatg ctggcgatcg tacgggacca tcatcaactt ctgctaccga 240
 gtacactcac agattggggc gcgagcgtgt tggcaatcca agaccgggac atcagacaac 300
 aattctttcg catcgagtcg gagtttgagg aatcatcca tcaagatgtc cttcgtacct 360
 cggggc 366

<210> 10159
 <211> 385
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB31-001-Q1-E1-C3
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gtcacctttt gttgtcagaa tggcaaaact tagttagcat agtgtttcag gtgtttcaat 120
 taatagtgtg tcattttttt gaggtactga tgctctcatg ttgtaagcgc tcaccgtgat 180
 taggtttctt tgatggcggg gcagagttgc agagtgtcc aactgaaaga tcccttggtc 240
 gccgtctcgt gtactggact atatccttcg tcactttagg taactacggg tacgggaatg 300
 gtatggcggt ggaggacacg tcaatcgccc acgatcacct gtcagaacac agcagcagta 360
 catttttagac gtaatgctat gtgta 385

<210> 10160
 <211> 406
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-C8

<400> 10160

aagcgtgggt ttgttgcac caactctaag ggtgaccctg ccaaggaggc aaccaacttc 60
 acctctcagg tcatcatcat gaaccaccct ggtcagatcg gcaacggcta cgccccagtg 120
 ctggactgcc acacctcca cattgctgtc aagtttgctg agctggtgac caagattgac 180
 aggcgatctg gtaaggagat tgaggctgcg cccaagttcc tgaagaacgg tgacgctggt 240
 attgtgaaga tgattccac caagcccatg gttgtggaga ccttcgccac ctaccacact 300
 cttggccgct tcgctgtgcg tgacatgaga caaacgggtg ctggttggtgt catcaacggc 360
 gttgagaaga aggacccac cggcgccaac gttaccaagg ctgcca 406

<210> 10161
 <211> 396
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-D1

<400> 10161

agcacggtct agaattccgg gccgacatcg agccaaatgc acatgtcaag caggcgatga 60
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 agattgtcca gatcaagcgt gccgaggggtg aagcagaggc caagtacctg tctggcctcg 180
 gtatcgcccc ccagcgccag gccattgtgg atggcctgag ggacagcgtc ctgggcttct 240

cagtcaatgt gcctggcacc actgcaaagg acgtgatgga catggtgctg atcaccagct 300
 actttgatac tatgaaagag gtcggcgctg cctccaagtc ctggcggtg ttcattcccc 360
 atggccctgg tgcggtgctg gacatcgcca cgcaga 396

<210> 10162
 <211> 377
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-001-Q1-E1-D2
 <400> 10162

cggtgcgaca ggacgttaac caactttgag agccaatctg aaaccattct ctcaagcatt 60
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 taatttggat cgagagcaca gattcacgtg aaattcaatc agatgttagt atcaaagaaa 180
 attagtaagt gaaagtgcta aaagaaacat aacataacaa tggggaaaac cggtgcgcgt 240
 aactcctgat tgcacagggt ccgggtaacc gtccgaccaa tttgggtctc ttgtacgcag 300
 tctttcccta catttcagca aggctgtttc caagaacgaa agccgtgacg caccggcaca 360
 aggaacaac tctacag 377

<210> 10163
 <211> 381
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-001-Q1-E1-D3
 <400> 10163

agtgaagaga aaaaaagcc atacggaact caaaatattt tccggagata ttcattttcc 60
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 ttctaaggaa tcaaaagaag gaaaaattgg gtctatgttc aacggaaaaa cattctcaag 180
 agcaaggaaa agtattttgt ttccgttcgc cctacagtgg catatgaaat ggacgaatga 240
 agaaatttat caacactttt cccgcagat ctcttcgagg aagaaaataa tctccagatt 300
 cgacttgtca attttatttc tcaagacaat agcaagttaa ctcaaagaat ttatcacaca 360
 aacagtcaat ttgttagaac t 381

<210> 10164
 <211> 375
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-D4

<400> 10164

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cgggccgact ctcctagggg ttcaggaata ttgggggtatt tatatagcag ataagcagtt   60
caagggggcac ccaagatggg cacaaaccac cattgcgcgc cctgctgggt gttgccctcc  120
tcgacgaatg ggcaggtaca accttgggtcg actggatgtc ggtctggaca acaaagtcct  180
caggaatfff cactatgttt ggacgccgtt tggaattgat ttcttgcgag tgtaaagaca  240
tgcatactcc accaactggc attgagcagt atgtgaatag gttccgacta aagaatgtta  300
ttgaatgact ataaaatggg tgtgccacat ccaagaatga tgatattgca tcatgggtata  360
atcaataatt ataca                                                    375
  
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<210> 10165
 <211> 377
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-D7

<400> 10165

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attccccggc agacccttca aatgactatc aggcggagga tgggaagatg ggaaagggttg   60
atctggatcg gtcgcctagt ctgcaggagc aggatgacaa gtctgctcca tatagtcctg  120
tgtataatgg cgaaggaggc aggggggtcaa tgagccctaa tggcgagcca gtggtggatg  180
ctaaacctgt ggaagtcttt gtgagcagca agaagaggga ggatgaagag gaaggatatga  240
tagatgaata cggagaggag ggtatgatag ccgatgatga ccctcgcgca attgcagctg  300
tgcagaacgg tgatgataag tgacaacgct ttgaacgatg aatttgctat ttcaacaaca  360
atccatgtta aattttt                                                    377
  
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<210> 10166
 <211> 322
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-E1

<400> 10166

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atgggggtatc catccgtctc ttcgtggctg ggtgaagctt tccgcaagat gtcattggcgc 120
ttctccatgc atcgcggcca tccgtgggtt tctccagggt gcccgtaac cgtcctccag 180
ccagtactga attttgaagt ccgtcatgag cttgatgtca tgggggtttc atcatcttga 240
ctctcgcac tcacttatga atcactcaac caaccccgtc taccagcata ttacaataaa 300
ctacatcgtc ccgggcatct gt 322

<210> 10167

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-E11

<400> 10167

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gcttcttaag attattgcct ggtatgggtg aataaattca gagattgcct ttgcagtggc 120
ctgtagctac aaagatgatt atttagaaga acatagatga tgactaacta ttgagaagca 180
taataatgtt tttatttctt cttcatgaca atcaagggtca aacaaatata ttcattgtta 240
tcagaatgaa ataaaattga tggacagtgc cactccattg ataactagag ctagcagtgt 300
gtttcatcta gatgggttaca ttttcttcat agaagaatgt acaatgctag aattagtaga 360
cgcgagacag tcaagatctt catgcactca aactcgttg tactgagttt tttacaata 420
ctcattgtaa tatgtg 436

<210> 10168

<211> 344

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-E2

<400> 10168

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gacttgttgt accgtatgta cgaccacgtg tatctatcta tgtaccacaa cacatgtagc 120
 gtgtgtgtgg ttatgtgcac cgcaatagca tatgtctgta acctaccgtg tcgtgtccgt 180
 tgtctgtatc gatatacatt gtgatctaca ctaaggccaa gatctgggca tcgcaccact 240
 tcttgtcagt gtagtcaacc tcattgattca tccgacaacg ttaaccacat tggatcgtga 300
 gactatagga ctcatgggaa gtcttgaccg gagggcctga aaac 344

<210> 10169
 <211> 410
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-E3

<400> 10169

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 gtagcgtgcc gaccgcatc acatcgactt tggaaccatt tcctacgcgc atcgacacct 180
 cgtccctccc cagttgttgc ttggttcatt tccattgttg agaacttgag attaatggcc 240
 attataggat gtgttcattg agaagttgca tgttgcttaa tctatggatc cagggtccac 300
 tatttttcgt cttgcgagaa attcatgggc tattcttgtt tgatgtgttg ttcttcttaa 360
 actttgctct tgtattgatg atggtgtaat attactaaat attattgatg 410

<210> 10170
 <211> 111
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-E5

<400> 10170

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 aaccttttta ggcattgaaag gcaagtattt tttttgtatt ttcattcttt t 111

<210> 10171
 <211> 348
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-001-Q1-E1-E8

<400> 10171

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ataaaattcc tcatattatg cgtgtttcga tctcattgcc acacaagtct cgtcacagtt 120
gcggaacggt ttaccacctt gagttgcacg tagcttcgga tgcatacaat tgcatacgtt 180
ttgcaccttc gtagttgcat ggattccgat aattctagtt gtacgtaagt gaaacaagag 240
tttttgtgac aaataaaaag aaaaggcaac aatttttctg tcaactgacg taggaaaaat 300
agggcatatc aacactacga naatatattc ctggataata catgactg 348

<210> 10172
<211> 343
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-E9

<400> 10172

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aagtcgcgag ttcttacctc gaaggcgta ttctggcaaa ccaagataag gataacttcc 120
tcgtgcctta ctttcccgag taagtctcc cctcaaccgg cccgtaacat atgaattctt 180
acatttcgat cgtttttctt ttaacatacc gtgtgttctg cagtgacaca cgttgcacgc 240
tcatectcct aagccccaaa tattccactg ggacgtattt cgaccgggag cgtcagtcgt 300
acgtagacta cacaaatgtc aagaaggttc ttgatgatgt tct 343

<210> 10173
<211> 257
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-F12

<400> 10173

gtacgtcatg tatgagggcc cgggtgcgaca atccggtggc actgctaacc ctttagagtt 60
tgaccccgga atctagccct ttgactttgc atacaccggg tcccatacac acggtaaact 120

aaaaatctaa aaaaacgtaa taatcgaatt tattaanaac tctgggtattc atcatggaga 180
 ggtccatcgg tcaaactacg tccagcgaaa gtcaaaggga tagacccgac ggttgtctat 240
 gtcagggtta gacggga 257

<210> 10174
 <211> 408
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-F2

<400> 10174

gggccgactg tcctttcaga tattacgagg agaagataat tgccttgcc ttgtggttct 60
 ttcaaagtta aaactgagca ttgagttatg ggggaggaag tcaaacagtg atggtattgt 120
 ctcatgggtg ctgcagaaat gtgttcaact ggacgagctc ttttcaagac ccgcgcgcag 180
 gaaaaatgtc atcctgttgg cggggtatga tgaggacaca aatgcgatat ttctgtcttc 240
 ggattctcat gatttcatcc tccagctcga gtcggtgcag ttcagatata ttggaaggag 300
 agaatgcaca cacttcagaa tgtattatcc gtatacaaat ttctacattg cagagaggcc 360
 acgtgagtct aggattaagg aacagtgagt tgcatttctc tcgtggca 408

<210> 10175
 <211> 415
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-F3

<400> 10175

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 agtgaagtg acattcttta tcaagggtggc cctgttgaca aaatgatctt catagtgaga 180
 ggcaagctag aaagcatcag tgcagatgga agcagggtc cgttacaaga tggagatgta 240
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 aaaagtagat ttcatggtat gcgtttggtt gctatacgta ccgtgcgatg cttaacgaat 360
 gttgaagctt ttgtacttcg agcaagtgat cttgaacaag ttactggaca atttg 415

<210> 10176
 <211> 238
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-001-Q1-E1-F5

 <400> 10176

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 gagtttgtgc tactcatctt atcggaactt gcgtaactta agtctgtcct cagatattct 180
 tgcttccgcg gactcgtcca cgatcgagca cttctattcg atgccccgag gaccctgg 238

<210> 10177
 <211> 410
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-001-Q1-E1-F9

 <400> 10177

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 atcaagaagt ggaagatcat ctaccgggtg tacctcaact ccaagaagac ggtggccgag 180
 ggccgccgca tcgccgccgc caaggcctgc cccgacccca cctgcatcga gatcgccgac 240
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 ttcttccagg tggggaaggt gaggggtcag ctcaccaatg atgacggctc ccagtcaacc 360
 ctgcaatcac aacaaagaag cagctaata tcaaatagca gagctgggtcc 410

<210> 10178
 <211> 422
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-001-Q1-E1-G2

 <400> 10178

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acccgcatg cggcacaccg tacgtgacga ggaaggattg gctcgacctc cacttcgacc 120
 gaaagtagtt tagcttagtt taaatttatg ttttatgttc ggttatgcaa aactatctat 180
 gtttaggttt gaatgcatac tacttttcgt tgaaccttct ttgaacttga tcaaattaaa 240
 gtttacaaca ttaagtttag gggatcgacc agaaatggcc aaaaattgct ggtatatata 300
 tatataatag agagagagag agagagagag ggagagagta gcactattct gatcccgga 360
 tcagaatagt tatttggatc acgatcagcc taaataggtt ccgacgggca tgttcccgaa 420
 ct 422

<210> 10179
 <211> 409
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-G3

<400> 10179

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 tcaagaacat gatcaccggc acctcccagg ctgactgtgc tgtttctcatc atcgactcca 300
 ccactggtgg ttttgaggct ggtatctcca aggatgggca gacacgtgag cagccctcc 360
 ttgctttcac tcttgagtg aagcagatga tctgctgctg caacaagat 409

<210> 10180
 <211> 378
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-G4

<400> 10180

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 tacaagggcc caaccctgct tgaggcgctt gaccagatca acgagcccaa gaggccctca 180

gacaagcccc tccgtcttcc cctccaggac gtttacaaga ttggtggcat tggaactgtg 240
cctgttggcc gtgttgagac tgggtgtcatc aagcctggta tggttgtcac ctttgggtccc 300
actggtctga caactgaagt caaatccgtt gagatgcacc atgagtctct cctggaagcg 360
cttctgtgtg acaatgtt 378

<210> 10181

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-G7

<400> 10181

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cgcctgcacc caagggctgt caactgccgc aagaagaagt gtggccacag caaccagctg 180
aggcccaaga agaagatcaa gaactagagt gctactagtc agtttcatgg accggttgaa 240
tccattgctg tgttagcgtt tatgctattg tcgtctcgtt gtcgttgaac cttattttac 300
tttgctttca gctccaatc gttgtggtga tgataattga cagtattggt atatggtagc 360
aaacctataa ttttgccaaa aaacagatgg tcagacaaaa aaaaaagcgg ccgctct 417

<210> 10182

<211> 347

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-G8

<400> 10182

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ttccaaaaaa acgtacttct atctcgaaaa agcgtattcg taaaaaatt tggaaaagga 180
agggatattg gacatcgttg aaagcttttt cattagggaa atcactttct acaggtaatt 240
caaaaagttt tttgtacag cataataaat aaaatacact ataataatta gaattagcct 300
aacttaaaaa ccaatttgtt taaatacatc taaaaaaaat aggaagc 347

<210> 10183
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-H1

<400> 10183

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aatggtgagt ccatggatta tacgcactct cacctttccg ccattgctag cctctcttgt  180
accgcgcaac tttttccggt accataaacc caccacatat ccttcctcaa aacagcctca  240
aaacaaccac catacctacc tattatggca tttccatagc cattccgaga tatattgcca  300
tgcaactttc caccgttccg tgtattatga catgcatcat cattgtcata ttgctttgca  360
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<210> 10184
 <211> 387
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-H11

<400> 10184

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tccagagctc catgagttcc atgaagtaga acttctcctt gaagtagcgc ttgatgatgg  120
cctggacgtg acatttcagc agcacgccat cgtttatcgc agacaggcca acctgacggg  180
acaccaccaa cggcgctatg ttgttactaa tccatctcat ctacagagat gtactttcta  240
ctgcggatcg gcggtgaagt gaaagtactc acggtgggca gcttgtacca gcagaggttg  300
tcgcgcctcg tgtaggcgtt gtccgtgatg tcatccatca ccagcgcaga cgctggagc  360
tgcacattca gagacagaag tcgatgt                                         387
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<210> 10185
 <211> 418
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-H12

<400> 10185

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gaactactcg tacaacatgc gcaacaccat caaggatgag aagatcgctt ccaagctgcc 120
ggcggacgac aagaagaaga tcgaggacgc cattgacgct gccatccagt ggctggacac 180
aaaccagctc gctgaggcgg atgagttcga ggacaagatg aaggagctgg aggctctgtg 240
caaccccatc atcgccaaga tgtaccaggg tgctgggtgcc gacatggagg gcggcatgga 300
cgatgacacc ccggctgctt ccggcgggtgc tggccccaag atcgaggaag ttgactaaac 360
gagttgatgt tctgttgacg aggcgggtgaa gcctgcttct tagttattat gtgtgttc 418

<210> 10186

<211> 269

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-H3

<400> 10186

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ccttgtcgag aacggcgcat tcctgcccc tgacctgaac gaccacaggt tcaaccacc 120
cctccactac ggctctgggc tggagtgggc gtacgagatg aagcgcatgc atgacgagag 180
tgactcgggc ggctaagctt ccttaagctc atccagctac tgaaaagtga tctatccgca 240
ggggattctg ccgatctttg ggttatgac 269

<210> 10187

<211> 291

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-H4

<400> 10187

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gcaccaacc gtgctcccaa gacaggagga gaattgtgca ttgcatatta gtttaagatg 120

caacgcttat ttgatcgatt tccagttaag catcctacct agctgtagct gctaaaacgg 180
atcggacgac gcaattcctg ctatgttctc cagtgtgttt ccagacctct tgtgttttat 240
gtgaacttgt gtcctccctg gtgtatcctg aataaagcac gcacactgca g 291

<210> 10188
<211> 414
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-001-Q1-E1-H5

<400> 10188

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gtacataccg tgctcacgga cgcacatc cttacatgtc caaccctgc cacattgagc 120
tgatcttgct agagaaggaa gagcctgtga agaaggaggc tgataacgtc gtcgcaccaa 180
ggaaagctat ctaagctacc ggaatggatg cattcgcca acagtcttag ttgtagttct 240
tctcaagtac ctttgttggc agtgntgtt gcctcctga tgtntttgtt accaacattg 300
agtaaggatt tgttaagggt gatgctatcc ttgtgattgc gagtggtctt tatatgctaa 360
aacagtttca gatagttgag cattagcaca ccagaaccta tttctcagag atgc 414

<210> 10189
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-001-Q1-E1-H8

<400> 10189

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ttgcctctat caagtggat cagatttcca ggttgctcg tgagatttta cagtttttcg 120
tagtttagat cgagtctgtt cttcatacct acagtccacg aaaaagccac aaaaaaaat 180
tagggtagt tcatcatatc cgaaccaatc tgagcctttg cataatcttt ttagggtttt 240
gctttgttga atttgcggtt gcacgtcgt gtctagttgc tggctctaga gtctagttct 300
ttagagtttc gagttctggt cataagttgt cagccgccc ccgcaccatc atcatcgccc 360
ctgccatcta ccaccaccgc ttatccgcca ccgctccgaa tccgtatcca tataccacca 420

ccaatccgtg tccatata

438

<210> 10190

<211> 397

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-002-Q1-E1-A1

<400> 10190

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cccttaacag aactattctc tctggtagat gtttcctaca taatctctcc ctaataataa 180
agcacggatt gactttgtcg ggttcaccgt cacaatactc ttcttcccgt gaatttacac 240
tttcagttca natttannac atattcaagg tggactaat tttttgctaa ttcttggttt 300
cgtctgctcc tacgtctatg tcgccccgta cgtcctaaat cgggcttgct cagcctacna 360
acaaagtggg ccgtatgttc nnttgcgctg caccttt 397

<210> 10191

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-A11

<400> 10191

cccgggccgc ccttcccact atgcaaggta ttccaacatg tggaagccgc agtcgtgctt 60
aaacaagaaa agagtcagggt taactcacia gaacatatag aaaaaaatc ataacttcaa 120
ttcagaggtg acaaaaaaga gagggtgagc attggtttgg aggacacatg aggaaaagat 180
gggaaaatac cggtttcctt gcttcatagt cgccacgtac tcaattggaa aatgtctgat 240
ctggaccttt gagttttcat agtgacgggt ccatgtctct ttgaggttgt tgatgaagta 300
ttcaccatgc gtagtaagggt ctgcatcagc ttctgaacgc attgaatcaa gcacctcaaa 360
acgttggttc ttcaagtcaa ggcagatcgc atagtgggtga acacacttgt cgtg 414

<210> 10192

<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-A3

<400> 10192

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tggaacatga tgctaaacca gttgttgatc accaacgtcg gttaaatccg aagatgaaag 120
agggtgctaag aacagaaata ttaaaaacttc taaaagaagg tataatctat cctatagttg 180
atagtagatg ggtaagtcac gttcattgtg tccctaagaa aggaggtatt actgttggtc 240
ctaatgataa gaatgaattc attccacaaa gaattgttac aggctataga atggtaattg 300
attttagaaa attaaataaa gcaactagga aagatcaata cgctttgcct tttattgatc 360
aaatgcttga aagattatct aagcacacac acttttgctg ccttga 406

<210> 10193
<211> 455
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-002-Q1-E1-A4

<400> 10193

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gggtcactat tgaggggtgat gttgttcact tgcacacatt gtggaagtgt gtttttttag 120
caaaatgaca aaaaagtaat gcgggttcatt tcaatatata ttgtggttca cttgccctcg 180
tctctgcggt ccactctcac tcataaaaaa tgttgaaaaa aatacaacaa aaactcgtgt 240
gagaaaaatt acgtccaaca aaggaaacca tgaagttcac ttgactgtct gatgcggtgc 300
gactttttta tctaaagcag tgcgttcctt tgtctgatgt ggtacatacg acgattttgg 360
gtcgccaaaa aatagagtgt ccatatttcg ttaaaatcaa aattgctctt aaaccgtaag 420
gaagttcgct tcttatcaga tgtagttcac tcgct 455

<210> 10194
<211> 443
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-002-Q1-E1-A5

<400> 10194

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ctcccccttca caaacatgac agcagttcag gccgcttttg ccgtggtaaa caagaacgcc 120
cgccctgcaa tcccgaaga ttgcctgcct gctctgagcc acatcatgac gcgctgctgg 180
gatgcaaacc ctgaagtccg cccgtcattc aacgaggctg tcaccatgct cgaggctgcc 240
gagacggacg tcgttagcaa cgtccgtaag gcacggttcc gctgctgcat ctccgagccc 300
atgaccaccg actgagacta gtgccaggat acagagtacc agaaaatgaa aaaatgggaa 360
gaagaacgag gatgggaaag gaggcgacac aatctcgatg tacagaccac actgatacac 420
ctgngcgttg cgtgtgcctg cct 443

<210> 10195

<211> 405

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-002-Q1-E1-A7

<400> 10195

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ctcatcacag gggctctctt atcagcaaaa tagctactct agatgcgcag atgacgatcc 120
agccgcgggt gcgctttatc tcgtcgggac gaaatagccc tgccctgtcc ctgccgccgc 180
cggtagaggc tattttccat angccaaggc gaacatccgt gtctaattgg gcgaatttag 240
tctggttcca tgagcacttc gttccccgcc atgcaatctt tgttgattcg gaaagatggg 300
agctgtctgt ttagctaatt caatctacca ttgatcatgc taatTTTTGT tatataggaa 360
acaacatgga catgctgccc ttttttccaa tcaaaatact tctgt 405

<210> 10196

<211> 387

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-B1

<400> 10196

agagagattt gagtgttggg gagactatca tttgaagcac aagagcaagg agttcatcat 60
caacacacca tttgtactt cttggagagt ggtgtctcct agattggcta ggtgtcactt 120
gggagcctcc gacaagattg tggggttgaa ccaaggagt tgaagggca aggagatcgc 180
ctacttcgtg aagatctacc gctagtgagg caattccttc gtgggcgatg gccatgatgg 240
gataggcaag gttgcttatt catggaccct tcgtgggtgg agccctctgt ggactcgcgc 300
aaccgttaac cttcgtgggt tgaagtctcc atcaacgtgg atgtacgata gcaccaccta 360
tcggaaccac gacaaaaaca tccgtgt 387

<210> 10197

<211> 450

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-B2

<400> 10197

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tcccaaagcc agctgccaac caagatggag aagaagagct tcctctctcc tgcgaaggac 180
ctgaatccaa ccctcctgcc ccaaccagtt acaccgaggc accagccggc gacgcgaaag 240
atcagcagcc gcagcagcgg cacacaagct cggagtcgtc gcctcctcct gatctcatca 300
gcatctgac atccaagtac ccggaagcat cgccgtccgt cgcaaataatg ttggggcttc 360
ctttgatcgt gcaagcttag gcctgaatct ggggttcgtt ggggtgagaga ctttggttgg 420
gttggtgctgt acatatccaa gctgctttgg 450

<210> 10198

<211> 455

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-002-Q1-E1-B4

<400> 10198

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 ttaattagct acctaacaca atatatgaaa cacattaatt aaccatacaa aacccccaaa 120
 tcgccccctt tcagaaaaaa aaagaaaaac cctagcccct gaacagctga cgcgtggatg 180
 cctattggtc ccggttgggtg tcaccaaccg ggaccaaagg gcctcctgcc tgggctcgcc 240
 gcaccggcca catggaggcc catctgtcct gattcgtgta agaaccggga ctaaaggcca 300
 agggcattag taacaacctt ttagtcccgg ttccaaaacc gagacagaag acccttacga 360
 accgggacaa atggcccttt ttctactagt gtgtccattt tgtacacgaa gtgcatccag 420
 tttttctcgt aaccctctca aaatttttagc acatg 455

<210> 10199
 <211> 439
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-002-Q1-E1-B5

<400> 10199

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 gtggggtccg ggaaggagag ctccccgccg gaattggagc tgtctgcggg gaaactcaat 120
 ccgcaagcac catggttggc aatgaggatt cgcattggat cagcgagtcc atttagaggc 180
 agcgtggtca agttagccgg actgtgggcg cccgcaataa taaaagagat tgggagacca 240
 tgcagacctg ctactgcaa gaaccacggt gtacaggggc actcgagatt tttttgtac 300
 aagccgggtg aaatgagact gggttcaggg gcttgagtcg gcgttcatgc caaatggta 360
 gacagttggg ttcgaattcc ctccagttgt gcatcacaaa gagtttttag ttatgtcaac 420
 gtgcgtgtgt tattttctgc 439

<210> 10200
 <211> 406
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-002-Q1-E1-B7

<400> 10200

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 cgccttcttc ctccccaaact actcctctcc tctcctccgc gcacgcgacc ggggtcacct 120
 gagatcacac acacaatggt gaaggctgtg gctgtgctta ctggcagtga ggggtgtcaag 180
 ggcaccatct tcttcaccca ggagggagag ggcccgacca ccgtgacggg aagtgtcacc 240
 ggactcaagg aagggtcca cggcttccat gtgcacgctc ttggcgacac caccaatggc 300
 tgcattgtcaa ctggaccaca cttcaacccc gctggtcattg tgcattggggc acctgaagat 360
 gaaatccgcc atgctggtga tcttggnaat gtgacagctg gattgg 406

<210> 10201
 <211> 444
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-C1

<400> 10201

cccggtcga cttccaccaa agcgaaatcc accatctcat cgaaagacgg gacacctttg 60
 cctctatcaa gtggtatcag agcggatca gttttcaggt tgctcgggtga gaatttcag 120
 ttttctaga ttagatttat tttcttacct attgtccaag aaaaagccac aaaaagagt 180
 tagatctatt catccttggc ccaagccagt ctgagccttt gcaattttct tttcattgct 240
 tgcattggtg aattatcggc tgcattgctg tgcgagttg ctggtcttag tgtctagttc 300
 gtttagagtt tcgagttctg ttcacattag tcacgccacc gctgcatcat tatctcttct 360
 gctgtcaaca cccatccatc aatttcacc acatgccacc catcattcat tgcataata 420
 atagttgaga tcgttcacat ctcc 444

<210> 10202
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-C10

<400> 10202

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 aatcgagctc gcgagcaccg catcgacgcc aacgccttcg tcttcaacct ccggttcggc 120

gggttaaccgt cgccattcgg cggcaacggc ggcttcccg cctccgtcaa gctcgtcttc 180
 ggcatcaaaa tgctggagtc caggagctag agatcccag gatgatttta cgtggagttc 240
 ggcttcgagg agtagttagg aggtcccagg caggaggcct tgccttttcg atcgttgcta 300
 cttttgtgct agccttctta aggcaaactt gtttaactta tgtgtgtaca cagatattgt 360
 cgcttccgct gactcgtcta tgatcgagca cttgtattcg agccctcgag gcccctggct 420
 tgtattatga tgcttgt 437

<210> 10203
 <211> 392
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-C2

<400> 10203

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 aactggacta tcagagataa gtgcagaatt tgggtgggcca atgatgacgg aggaggaagt 120
 tgggtgggagg gacgtgtgtt ggcaataaga cctaagtcac ctgattttcc tgagagtcca 180
 tgggataaat atgccataca atacaagaat gatggttcag atcatctgca tagcccctgg 240
 gagctccatg atgctgatag cccattgggt ccatggaaac atccacatat tgattccagt 300
 attaggaata aattgttatc agcagtgacc agtttacaga acaagtctcg cagaaaccag 360
 gattgctatg gtgtcctgaa gttggatgct gt 392

<210> 10204
 <211> 247
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-C3

<400> 10204

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 tactcacggc ctcgagactt gtaatataat gttctatctt tgttcgggtct tttcaattcg 120
 gagactaata tgatgaattg tattcggaga ctaatatgat gaattgtatt cttctattgt 180
 attcgatgaa tctgttggtg atgtgtgctg tctatTTTTT gtcaaactat acattttgta 240

acctgtg

247

<210> 10205
<211> 458
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-C4

<400> 10205

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tcctatgagc tcaacgtctt gggaacccga ggtcctaggg ggatgcgctg tgtaatgcac 120
tccatccctg cctcatcgct cgaggctggt ggcagtgtcc cttgccaacc ggatatcatc 180
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gaccattcca tgcgttttag cagtgccaga ttctccgacg tctcaatagg aggtggcccg 300
gcgatcagag gacaagcctt gagcgacggc gatgatttga aggacacgcc gttgattctc 360
cgcaacaagg ttccaagatg gcatgagcag ctgcagtgtt ggtgcctcaa cttccgtggc 420
cgggtgactg tggtttctgt caagaacttc cagctcac 458

<210> 10206
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-C8

<400> 10206

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aaactatcat agaaagtgca ttgaacacta ggatcaattt gatgcttgat aattgttttg 120
agatataaag gcggtaatgt tagagtcagc ctagtgtgta attatgaaat tgagaaatac 180
ttgtgttgga gttggcaagt cccgtagaat gcacgtatgg taaaagttgt gtgacaaatt 240
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ggtcttttcc taccaaccta tcctctagg ggcagtcgta gtagtacttt gcttcgaggg 360
ctaagtagac ttttgcaata agtatatgag ttctttatga ctaatgtgag tccatggata 420
taagcacact cacccttcca ct 442

<210> 10207
 <211> 375
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-C9

<400> 10207

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 cgaaagtgcc atctatttac atttatgtgt agagtcacat tcctcttatt aaaacgcacc 180
 atttgagag caccgctgta atttgtaccc attagtgtta ttttacacag tgtaacacat 240
 gagagtatct cttttaccat gaattacaat ttctagtcag tccttgatct ttaaagggtgc 300
 tctgcattta tgttttgctg tctcagaaag gtctagtgag ataccatctt gctatatcat 360
 atcatgatta ttttg 375

<210> 10208
 <211> 417
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-D1

<400> 10208

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 tataatcaagt ggtatcagat ttctagggtg ctcggtgaga ttttacagtt tttcgtagtt 120
 tagatcgagt ctgttcttca tacctacagt ccacgaaaaa gccacaaaaa aattagggtt 180
 agttcatcat atccgaacca atctgagcct ttgcataatc tttttagggt tttgctttgt 240
 tgaatttgcg gttgcatcgt cgtgtctagt tgctggtctt agagtccagt ccttttagagt 300
 ttcgagttct ggtcaaaagt tgtcacgccg gcgccgcaac atcatcatcg cccctggcat 360
 ctaacaccaa cgcttaaccg ccaacgctcc gaatccgtat ccatatacca ccaccga 417

<210> 10209
 <211> 367
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-D2

<400> 10209

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ttgtccagga gtgagtggaa caacgactcg gagcgacgat caccgccctt gtgcctacct 180
tgatctcggt gttgagtgcg tggattgcgg gcggccaaca ggggccgccc ccgattccta 240
gcttcacagc tagcaactcg cataatgcga tggcggggcc attggtgcct ccggcagagg 300
cggcactggt gtctccgacg ccggcacggg agcttaatgc acccgggtgt acgccggccg 360
gggactc 367

<210> 10210

<211> 446

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-002-Q1-E1-D3

<400> 10210

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cgtgcggcgg ctgcttcgct tcgtgaccgg acgacctgtc cagacgtatg aggctggttt 120
ggggcaccgg gctgtagatg tgctaagtta aaaaaatcca ccctttgtca aaaatgcacg 180
catctgaagc gggcatccat ggatcgttgc tactaattag catgattagg tcatagtac 240
aatactggag gttgttaaac attaaatcac atttgaatgg ttagatgtct acatcttgcc 300
gacaatcagg gaaggtagct cccttatggg ggccgacggt ctttttctct ttttggtgag 360
cccgacaaag tanctgtatt cgtaattttt ttaacaacac aatgagaact tcagttattg 420
ttggttgata actttaagat gtgaaa 446

<210> 10211

<211> 453

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-002-Q1-E1-D4

<400> 10211

cggtccagnn tatccgggtc gacccatta ggaagtcaga agaagagatc gtcactatca 60
aagctcaaat ggacaagtac ttggccgtgg tgaatgaaaa agaagctgaa aataccgagc 120
tggttgagaa gatgaatcat ctcgaggctc agctagtga agccaacaag gccagtgagg 180
aagccaagggc cgagacccgt caactgaagg acaactatt agacaaagag aacgaattac 240
agaacataca agaggagaat gaggacttgc aggcaaagga atcagctgct tcggagaaga 300
taaaagagct ctcttatcta gtgccgaatg gaacgacaaa tgggtggcaac aaggaagaag 360
ataacgagaa tgggtggcggg gtggatgacg aaccggctgt ggtggttgcc aagatgtggg 420
agaacagcaa ggtcaccgac tacgactcat cca 453

<210> 10212

<211> 431

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-D5

<400> 10212

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tatgtcaga aataaggcca ccacatgaaa gaaaattttc ggccgacggg ggaggtgacg 120
attcagaatc gtgttattct caccacacac cggtggtcc acccgccaag ccttcggtg 180
tgagcgggaag ctgcaagaaa gaagccgccc ccaaggccgt atcactagcc gttgtccaa 240
gcaagcagaa ggggaacccc aacttgctca agaggatcct gacaggaacg aagaaggatg 300
ccataatcaa accaaagggtg gtcctgagtg cttagctgac agagaccaag ggtaactcta 360
tccatgataa attccatttc catgtgtaaa ttaaacctgt atcaattacc tggtgagctg 420
tggttcttgt c 431

<210> 10213

<211> 450

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-002-Q1-E1-D7

<400> 10213

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 atatcaaaca catcaaattc acatgattac ttctcccggtg acctcaagaa caaaagtaag 120
 tactcacaaa tgatattcat gctgaagatg agatgggtat taaatagcat aatggatctg 180
 aacatataat cttccaccaa ataaaccata tagtaatcaa ctacaagatg taatcaacac 240
 tactagtcac ccacaggtac caatctgagg ttctggtaca aagattgaac acaggcacta 300
 nggtttgaga ggagttggtg ctattgaaga tgttgatgaa gattggcctc ccaaagatga 360
 gagggttggt cgtgatgacg atggcttcaa tttccccctt cgggaggga gttcccccg 420
 cggaatcgct ccgccggagg gcaaaagtgc 450

<210> 10214
 <211> 387
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-002-Q1-E1-E12

<400> 10214

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 tgctttgcat gatcgtaaga tagctagcat gatgttttca tggcttggtcc gttttttgat 180
 gtaattgcta tgctagatca ttgcacatcc cggtagaccg ccggaggcat tcatatagag 240
 tcatatcttt gttctagtat caagttgtaa tattgagttg taagtaaata aaagtgtgat 300
 gatcatcatt attagagcat ttccccaaga aaaaaaaagg agaggccana gaagcctaaa 360
 taaaaaaggg gggccaaaga agccccgc 387

<210> 10215
 <211> 441
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-E2

<400> 10215

cggtcgacc gcttggtaaa cccgagcaaa gatatgaccg tgcctgagtt gtgcatcgtg 60

gaggagatca atgctgaatt caaggagtct gttcttgctc gggttggtct gaagggtaca 120
atcattttgc ggacgttacc accaaagaag gcagcagga gggagacaga gttctcatte 180
cggcttgagg gtgcttctgg aatgaagagg gccgccttgc agagtaccgt gttgagcagc 240
ctcgagaacg gcctgttcca tgtgaagaca ccatccaagg aggagcctat ccccatcatg 300
aaatacagct tcttgcccaa gcactcacct ctccccctga gggttcccct tggtaagcgc 360
cacagtggca cactgctccc gctgatgaaa cacaatgcgt cgaagccaaa gttgccgcaa 420
ccactgagca atgttacatt c 441

<210> 10216
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-F2

<400> 10216

cgggtcgaca tcgagccaga tgcacatgct aagcaggcga tgaatgagat caatgcagct 60
gcaaggatga ggggtggctgc aaacgagaag gcggaggctg agaagattgt ccagatcaag 120
cgtgccgagg gtgaagcaga ggccaagtac ctgtctggcc tcggtatcgc ccgccagcgc 180
caggccattg tggatggcct gagggacagc gtcctgggct tctcagtcaa tgtgcctggc 240
accactgcaa aggatgtgat ggacatgggt ctgatcacc agtactttga tactatgaaa 300
gaggtcggcg cgtcctccaa gtcctcggcg gtgttcaccc cccatggccc tggcgcggtg 360
cgcgacatcg ccacgcagat ccgcgacgat cttcttcagg gccagtctgc ctctgacaac 420
taagcagttt gcttcgccta 440

<210> 10217
<211> 456
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-002-Q1-E1-F3

<400> 10217

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tcaacgggaa caaggggcgg tgctacgact tctggctgga cttcagctcg tgcagagcc 120

gctgccgcca gccctccgac tgcggcctcc tccgcgagga ctacctcgag tgcctccacc 180
 actccaagga gttccaacgc aggaacagga tctacaagga ggagcaacgt cagataagag 240
 ctgctgctcg caaggccaag gaggaagccg aaggagctcc tgctgttgca gctcaccact 300
 agcatecctt ttcaattttt ttcttatgct tttgtttgtt gcaagcgctt ccatgttcgg 360
 ctatgagcaa ggcaataatt acctaaacat tgcaccctcc cacctccatg acttgttcta 420
 aaagcatgag tttgataaac taccttgggc atcaag 456

<210> 10218
 <211> 435
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-F5

<400> 10218

acaaggtgat tgaaccggat tttcaaccaa agcaggggggt taagatagtt acagatgaga 60
 aggccactag tctgtcctct gcatctgttg acgacgctgc tgtcattgaa gagcttattg 120
 ccaagttaga agaagtttcc aaaacactgc catcaggggtt ccacatgaac ccaatacagt 180
 ttgagaagga tgatgacaca aacttccata tggatgtgat agctggtttt gccaacatga 240
 gggcaaggaa ctacagcatt cctgaagtgg acaagctcaa ggccagggtt atagccagca 300
 ggatcatccc agctatcgcc acctccaccg cgatggccac tggcctcgtc tgccttgagc 360
 tttacaaagc ccttgtctggg ggacacaatg ttgaagacta ccgcaacacg tttgcaaacc 420
 tcgctatccc tctct 435

<210> 10219
 <211> 446
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-G1

<400> 10219

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 atgactcgtg gtcaccagca atgacggtca gttccgtgtg catcagcatc ttgtccatgt 180

tgtcaagttc accagctaag gtcacccagc tccctctaca ttatctacaa tctaactgaa 240
 cggtcattcta actgtacata ttgtttgcat gcaggaacgc ccatccgata acgatcgcta 300
 cgtcaggaac tgccgcaacg ggaggtctcc gaaggagacg aggtggtggt ttcattgatga 360
 caaagtgtga tgggtccag ctggtttctt cttccggcat cagcagctct tatacatcat 420
 catcctgcct accgtagtat ggcgtg 446

<210> 10220
 <211> 422
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-G2

<400> 10220

gggtcgaccg gatttgaag atagaaaatg gggaaaagaa agtctccact acttttttac 60
 gggaagcaac ataattgcaa atacattatc atgtgtccaa tggcaccac acgtatcctc 120
 atagttttat tttcttgagt tggctgacc gacatgtgga ccaacgaatg ggcatgtacg 180
 ccacataagt aggagcacia tccgtgacgg tccggatggt gtatattaaa aaaatgctag 240
 gcccgactaa gcccgttgg tcaatctgag acggattctg tgacggtagc cgcacgtccg 300
 tcatcaaggg cccgctgttt tcgggcccaa ccacggctta caaatcagtg acggtagtcg 360
 tgacaggtca tggttttccc gtcatttca tgacagattc taggaatgtc agcacgaatc 420
 cg 442

<210> 10221
 <211> 442
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-G3

<400> 10221

cgggtcgacc tatgtcgtga acaaaggtaa ggttcccgga gtctacgatg actgggagga 60
 gtgtcggaga caggttcacc gattcagcgg taacagttac aaaggttaca ccaactagggc 120
 tgaggccgaa tctagatacg cccgctatct agcgggagag gggaggagc gttggaggaa 180
 ccggatgaag acgattttca ttgtgatgat gctcatcgtg atgaccgcag ctctcttcta 240

tgtgatggta gtttagatga tcgatatcga cttgtaatgc aaagacaaac tcgctactcg 300
 cggctctcgag acttgtaata taatgttcta tctttgttcg gtcttttttaa ttcagagact 360
 aatatgatga attgtattcg gagactaata tgatgaattg tattcaaaga ctaatcttct 420
 attgtatttg atgaatctat tg 442

<210> 10222
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-002-Q1-E1-G4
 <400> 10222

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 aaggaaaggg ggtctgcgcc cccaccctcct tgtccaattc ggactgccat gggggggcgc 120
 cacctcttgt ggctgtctc ctctccacta tggcccatga ggcccattaa ctttcccggg 180
 gggtttcggt aacctcccag tactccgaaa aatcccggaa cctcttcgga actattccgg 240
 tgtccgtaca taaccttcca atatatcaat ctttacctct cgaccatttc gagactcctc 300
 gtcattgtctg tgatttcctc cgggactcca aacaaacttc ggtcaccaa acacataact 360
 cataatacaa atcgtcatcg aacgttaagc gttcggaccc tacggggttcg agaactatgt 420
 agacatgacc gagacacatc 440

<210> 10223
 <211> 304
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-002-Q1-E1-H1
 <400> 10223

gggtcgacag gtttgataa taatcaagaa gcagctggca gtccctgatg ggaccctgtg 60
 cacagcggag tcaaaatttt ctgaacttgg tgctgactca ctggatacgg ttgagattgt 120
 gatgggcctc gaggaagagt tcaacatcac cgttgatgaa acaagcgcgc aggacattgc 180
 aaccgtgcag gatgcagcgg accttatcga gaagcttctg acagagaaga ccgcgtaagt 240
 tctcgggttc attggacacc tttagaaggc aaatgtgtcg tctggatcgg ttggcttctg 300

304

<210>	10226
<211>	448
<212>	DNA
<213>	Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-H3

<400> 10226

ccgggtcgac tccgaggaat acactgtgga ggagcgcaac ctctctctg ttgcatacaa 60
gaatgtgatt ggagcccgcc gtgcctcatg gcgcattatc tctccattg aacagaagga 120
ggagagccgt ggcaacgagg accgggtcac actcatcaag gaataccgtg gcaagatcga 180
aactgagctt agcaagatct gtgatggcat cctcaagctg ctcgaaaccc accttgtccc 240
gtcttccact gcccctgagt ccaaggtctt ttatcttaag atgaagggtg actactacag 300
gtatcttgcc gaattcaaga gtgggcctga gaggaaggat gctgctgaga ataccatggt 360
ggcatacaag gctgctcagg atattgcttt ggctgagctg gctccaactc atccgattag 420
gcttgggctg gcactaaact tctcgggtg 448

<210> 10227

<211> 364

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-002-Q1-E1-H5

<400> 10227

gacagaagaa cgacgatgcc gagccgccgg gacatgatct gagtttgtcc ggatggactg 60
cctcttgcta gatatgtacg tacgtatggt accattaatt aaccaagcat gtggtgattg 120
cattatTTTT tggccctga ttggatctca tagtacttat gatacataac caactcaacc 180
cccctccttg ctctcgattg tattatatgt gcgagcatcg ttctatgaca gttcttgata 240
tactcacttg ttgaaccgca caagtgcagg ctgatgggtg tctcctctga ctaacacccc 300
cagctgacgc tcatggcagt cttaatgata acccactagc taattgcaag tgttgctttg 360
tttt 364

<210> 10228

<211> 330

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-002-Q1-E1-H9

<400> 10228

ctacatgaca catcaccata tttgggccta agggaaatgca ttgtggagta gttattagat 60
gatgtgttgc gagagtggca gaagcttaaa ccctagttaa tgcgctattc cgtaagggac 120
cgattggatc caaaagttaa atgctatggt tagaatttat tcttaatact tttctcatag 180
ttgtagtgtc ttgcgagggg gttaatcata agtaggaggt tcgttcaatt aagaacagca 240
cctaagcacc ggtccacca catatcanat tatcanagta gcgaacacga atcgaatcaa 300
catgatgaaa gtgactagat gaaattcccg 330

<210> 10229

<211> 281

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-A1

<400> 10229

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tggagatacc cagcacatac cgccttggcc accgatgagg aacaagcttc agaaacctga 120
agggtagagt cgaagagtct tccatgggtt gaagcgatgt ttggcttcct gagtttccga 180
tgtgtgtcct gttaacagaa atactaatag agcgcttgcc ctgtagaccg acgcctgttt 240
tcccctcacg tatgggtttc agccgttcgc tgtcaatatt t 281

<210> 10230

<211> 366

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-A10

<400> 10230

gggtccacgt cggtatccct acaaagactg ggggtgtccc ttgttttagtg ccagctatcc 60
gcaatgaacg tctaaccaag gacttcaaag gccctaggaa ggtgcctaata tacacggcag 120
acttacaacc cgcagcctgg atcgagagtt atgagatggc tatggaaactg tgtgacgccc 180
ggataattag gctacagtaa tcccacgtta acgatgccac gtcaccccgt ttactgttga 240
taaactctcg atagttcaga accgaaacaa attcaaaatt taaataaaaag caaataatag 300

aagtttataaa atattaaaac taaaatgttc ggagtgcgcc aaatagtcca tattaaatat 360
 tgggtga 366

<210> 10231
 <211> 450
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-003-Q1-E1-A12
 <400> 10231

gggtccacct cctccggcct acacctgcga ctgttcatcc atgggctcct gttcatccag 60
 cctccaccgg ctactgttca accagccctc caccggctac tgttcaacca accctccacg 120
 gggtcctgtt catccaaccc cacaccaaga attgttcatc caaaccccg t caacaatgct 180
 cactgttcat ccaggaagg aggcaacggg gtttgatcgg cttcagttag cagcagtagc 240
 gaaggaatca cactcgggtt tagttaacag caagggatcg atcgatcgct cgggttcagt 300
 aatgcgtatc ctgcagtga atcgctcggg ttcagttaga gcccaacgcc tcacacacac 360
 ccccgtagt acgagagaaa cgcacatcgc tcggccctg accagccacc gtaaccggga 420
 actccccggg attttctcgc cctcgccttc 450

<210> 10232
 <211> 436
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-003-Q1-E1-A3
 <400> 10232

ggggccacgt cctctgcttc atcttctcc agggctcgta gatgtttttc tggaccaatg 60
 aggtctccca ttagatacag agagggggccg ctggactacg agccattcac accatgtgat 120
 tgccgtgaga agccaaaagc agccatgtgg atctcatgga ggcacgagaa tccaggtaga 180
 agatacaaga catgttaccg ctgcaggagg ggaggttgtg agttctacga gtggcacgac 240
 aatccgatcg cagatccttt cctcaaacag ctgggttatc atcttaggga ccaagtgtgg 300
 ttatttgaga ggaggaacgc tgctctgcaa gatgctacga ggacagcaga aactgaagcg 360
 gcaaattctat ctgcacaact ttcagaagct atggagtcgg gcatggacag ccgtgcaaaa 420

attatggtgg ctcctg

436

<210> 10233

<211> 386

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-A4

<400> 10233

ggggccactc tcttgacctg atcaacgtgg atttcactgg gacatgatgc ccgcccgcctg 60
cacacaagtt tgctatttct gcatggacta ccaatgctgt caacgttggtg cttgcctcag 120
acaacgctac tgacaccaca ctacgaaaac tgcacgttaa ttctgggtttc tttgcccaca 180
ccgcatgcct acaaattgcg atcaagcaac cgtctgtggg tcataagaga tgactacctt 240
tggtatccac ggcttgtcta ctactgtatc catgtctcaa tccacatggc aactcttttc 300
aattctgctt aaacttacat tctctctctt acgtcctaac gttatttcat ttttttcctt 360
tctgttcttt tccaactgat ttgcca 386

<210> 10234

<211> 339

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-A5

<400> 10234

gtcgacatcg atcatgatac gcaggtaag caggctatga ctgagatcaa tgcagctgca 60
aagatgatgg tggctgcaag cgagaatgca gaggtgata agattgtcca gatcaagcgt 120
gccgacgggt aagcagaggc caagtacctg tctggcctca gtatcgctcg ctacgcctac 180
gccattgtgg atggcttgac ggacagcgtc ctgagcttct cagtcaatgt gcttggttagc 240
actgcacacg acgtgatgga catggtgctg atcacgcact accttgctac taataaagac 300
attggcgcgt cctccaagtc ctctgtcgtg cttatcccc 339

<210> 10235

<211> 354

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-B1

<400> 10235

tttatactat gcaacagtca ttttttttagt ataaaaaata acggagggag tataaaacaa 60
ggggtacgac tatccttggt gcaatgctat gtctggctgg ctatatgcat gcatgcaatg 120
tttcggcatg tcatgtatgg gccatggatg ggtcacactt acatcatcgt tgaactttct 180
agtttgatgg atattagtag gcagatgaga aatgaaagaa cacatacatt tgtccaagtc 240
gttaatgatt gtgtggacct agcataatag actacaaatg tatttgtacc attggtattg 300
cccattatag gagggaaact tctcaaacaa ctttacacaa gttgcacctt ttgt 354

<210> 10236

<211> 410

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-B12

<400> 10236

gggtcgacgc cgacggcgac agcaacgtca acttcgagga attcaagaag atgatgggag 60
gcggagggag gagctaggct ggtaagggcc ggccatgagc aaacaatgct gcatctgcat 120
gcctcgttga ggggttttgtt cctccatggt gcttaattta attttaatta atctcaaagt 180
gaaaggctta ggctccccgt aatgcgaata ctaatgatga tgcgggtgaa gtgattaatt 240
atgtaaactt aatcttctag tagtagtagt actactaatg atgatgggtg tactaagaaa 300
tttggctctgg ggttggttgc aatgaattag aactcgtttg aaaccctttg ttttctgtt 360
tggcactctt tgtttttctg tttgaaactc atgcaaaatc aataactata 410

<210> 10237

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-B4

<400> 10237

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tctctcttgc gcgaaatata cgattcttag caaagaacca gctggtggaa ctatttlogcc 120

caatgattct tttgagttca attcacaatt tactgactgg atgagaagga tcaagatacc 180
 octagctcct gttgatgaga agaaaaaggt tggtgaggac gttgacaagg accggaagta 240
 tgcaattgat gcatcaattg tgcgtatcat gaagagtcgc aaagttatgg cccatacaca 300
 gctagttgcg gaatgtgtgg agcagctcag ccgcatgttc aagcctgact tcagaacagt 360
 caagaatatg attgaagatc tcatcacgat ggattacctg ga 402

<210> 10238
 <211> 431
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-B5

<400> 10238

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 cggcacaatt gagacagtgt tcacaaaatt tagaacgttt cactgaaaat tgtgaacatc 120
 ttttaaatac cgaatacttt ttagattccg tgaacaattt tctagaacag aaacattttt 180
 cgaaattcca aaacagtatt tggaacaaaa atcattttgt gaaatccatg aactttttgt 240
 aatacgcgaa cattttttta atccatgact tttttaatat gcaaacatta tttgaatctg 300
 tgaacaatat ttaaaacgag aacaattttt tgaaaacttg aataacctat aaaaaaactg 360
 taacgcattt taaaatgaga aaatagtttg aaataccgaa aaaaaatcac acaagcaaat 420
 tttgaaacta t 431

<210> 10239
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-B7

<400> 10239

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 cagtaccac tgctcgtcta gtatgtaagc cgctattctt tgttccagtc ctgcactgat 180
 agtctgatac cactatcttg ggctctaaac attacaggat gctccgacga tcatcagaat 240

tcccttgaga gccatacttg acatcgtgct agcagagctg ggaatcccag aggccgaata 300
 ccgtcgcgag atatgcgacg ataacaagat ctgcgtcacc gtgcttttcg acgcctctac 360
 aatcaaagga gccccgccc atatgtcgat atccggaaca tattccacgg acgatgaagt 420
 ggcagaggac acagctgctc 440

<210> 10240
 <211> 344
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-003-Q1-E1-C10
 <400> 10240

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 cctcgaaggc gtcattctag tgaaccccag ataaggataa cttcctcgtg ccttgctttc 120
 ccgagtaagt catccctca ccggcctgta acatatgatt tcttagactt cgatcgttcc 180
 tttgtttcta acattctgtg ttttgtgcag tgacacacat tgcacactca tcctcttaag 240
 cccgaactat tccatggcca cgtatttcca ctcagaccgt caatctaaga aagactacac 300
 aaatatcaag aaatttcttg atgatgttct cccccggtat gcca 344

<210> 10241
 <211> 206
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-003-Q1-E1-C11
 <400> 10241

gggtcgacct tctagataga ttggatatcg tacggacaca gatatatggc cctatcgaga 60
 tgatccagat attagcaatt agagcacaag tggaggacat tgaaattgat gaggacagtc 120
 ttgcatttct aggacaggtt gggcagcaga catctttgag acatgctatt catctgatgt 180
 cacctgctat tgtagttgcg aaggct 206

<210> 10242
 <211> 330
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-C12

<400> 10242

gggtccagcc cgtacatcga aaaggcatat gatacagtct ataaataaat tagtacctac 60
atgattttga atataaggggt aaccttaaaa ccaatgacaa tcaataatgt gggataaaga 120
tggttaaagca agaatggggc gcaaccagac gtgacacgag cattttgttt tcccatggcc 180
tgagacaatg gggcatttat gtctacgaac aactccatgc tcaggacaga cacaacatgg 240
ggccaccatt agtggttaata atcccaaaag tgaatgagtc atggatgacg tttttacttg 300
aacaaaccat aagtcgcaa ccacaaagaa 330

<210> 10243

<211> 242

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-C8

<400> 10243

ttcgccggtc cacaagcccg acgccaacta ggatatggat gaacaattga gctttcttgg 60
atgttgacaa agctctttca gaatctcaga aatactgctg tgtactttcc ttgtatcaat 120
gggaaacagg ggcttctgtt ttgttttttg gtttcccaac gtcagattaa taatatatag 180
ataacctaaa tcatacaaaa tgtggttccc atgcaaatta tttatccttt cctaccttga 240
tt 242

<210> 10244

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-C9

<400> 10244

gggtccactc ttacttggga cctcaggctc aggggcggtg ctatgatcaa ggttaagact 60
ctcactggga aggagatcga aatcgacatt gagcccaccg acacgattga taggatcaag 120
gagcgtgttg aggagaaaga aggcattcct cctgtgcagc aaaggctgat ttatgctggt 180
aagcagcttg cagatgacaa gactgccaaag gactacaaca tcgaagggtg ctcggtcctc 240

catcttgtcc ttgctctgag ggggtggttac tagttaagct gtaatggaaa cgcttgcgtc 300
 ctgagagaag tgaccattgg tggcatggaa cctgtgttgc aaagagataa taacaaacta 360
 gctttgctta gtgggagggg ctgtcttcca atgtagccgc ctatatgatt tgacagaact 420
 actcgcaagt taaaaaaagg gtttgctt 448

<210> 10245
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-003-Q1-E1-D10
 <400> 10245

gggtccactt ggccatggtt cttccgagca cgcataag tggaagacga acaattgggc 60
 ggcacggtcc ccttgttcaa gtcctgtggt ggaaggaagt aatttgcaac agctacgttg 120
 ttgtcaagga cagggatatc acctgtaaga gtctgaatg caaactccag gcatgggtct 180
 gaccagatac ttcgaaacag cgacgacagg gaatatccgg gcatagcatc agctgttcca 240
 acaagtccgt tcggttgccg cggagcatcc acattctggc atccaacgtc tgttaacgag 300
 catgcagcag atgctcctag tatctgttca ggagctgaag gatacttgtc ttcagcattt 360
 ccagaagtac ttggggcatg tgcaacatct ttattctgaa tttacggaga ggaaattgcc 420
 tttgacttag gaatttttga 440

<210> 10246
 <211> 422
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-003-Q1-E1-D12
 <400> 10246

ggtcgagact ggcgcgggg gcaacaacgc cgccaagctg cacgagctcg acgagatgaa 60
 gcgcgctctc aaggagatgg aggaggaggc cgctgccctc cgcgagggtgc aggccaaggt 120
 cgccaaggag atgcaaggcg gagatcctaa cgcgaccaca tctgaagcaa aagaagagat 180
 ggattctcgt tctgtttttt ttggaaatgt tgactatgca tgcaactccag aagaagtgca 240
 gcagcatttt aattcctgcg gaaccgtcaa ccgagtgact atcctgactg acaagtttgg 300

gcagcctaaa ggttttgctt atgttgaatt tgttgaagca gaagctatcc aggaagctgt 360
 caagctgagt gagtcaagagc ttcatgggtcg gcaaatcaag gtaccaccga accgaactaa 420
 cg 422

<210> 10247
 <211> 446
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-D3

<400> 10247

ggtccgagat taccgggtcc acccctgggg gctacacaac attgctcaaa tccacatgat 60
 tatatttaca aagtacctgc tcattattgc ataatgaccg gacccttggg ggctacacta 120
 gttgaagttt tgagtataag acaattacaa gtcccagggt gctgcaagca tgacaaccg 180
 gcacttggga gctacataat atggagtatt cagggttttac taagtgactg ggatgaacaa 240
 catgggtttc ttcttaagtg gcagtattta tgttgaagca agtcttaagc catcactttg 300
 ttctactcaa gacttggggg ctacaggtat tataatatta tcgaagaaat attttttcag 360
 actctgtttt gagcaaacca gattgaaccg gtgtctgcaa caatcatgcc ccggaattat 420
 cagtttttat aaccgaaaa tggtgg 446

<210> 10248
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-D4

<400> 10248

ggtccgagat agcgggtcga gacgagagtt agcgatctac agctgggtcg gtggactggt 60
 ggtgacacgg gcggggccctc tactttatct gccgaatcca atcgatcatg ggcgggccctc 120
 ttcgttcaca gtctttcttt cctttcgaat ccaattgttc caatctgacc aaatagcaat 180
 tcattgaaat cattcgggtc acctcttttt taagcacttg accaagccta tttctataga 240
 aaaggacagg aatctattga ctttgagtct gtctcctact acgaaattgg aactgaatac 300
 aggatggcaa tagtgagaaa aaaaatcccc tcgtactacg tcattattta ttcgattttc 360

cctggtaagt gctccagatg cagttgcttt agttgacgta ctgagtggga actaattata 420
 tgtgtccttg aataccagag 440

<210> 10249
 <211> 392
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-D6

<400> 10249

agttgaccac tgcaggatgc acggatgcgg agaaggtgtg ttttgccgca catcagctag 60
 atggacccgc agcatcatgg tgggagaatt tcacaaccac ttatcctatc gacactgtca 120
 catgggacca gtttcagcag gctttccgta ctgcccattgt tccagcagga gctatggcca 180
 tgaagaatcg tgagtttcac aacttacacc aatgaggacg tacagttggc cagtatgtgg 240
 atgtcttttag taagctagca cgttatgccc cagatgacgt tgctacagat gcagctaagc 300
 aggagaagtt tctggaagga ctgaatgatg agctgagcat gcagttgatg gtagcaacct 360
 tcaacaacta ccaggagttg gtaaggatct ct 392

<210> 10250
 <211> 420
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-D9

<400> 10250

ggccggtccg atattacggg tccagaccac tggccaactt gtctatgagc ttggaggcat 60
 tgacaggcgt gtgatcgaga ggttcgaaga tgaatcagct gagatgaaga aatgtggcaa 120
 gtacgcatgg gtgcttgaca agctgaagtc tgagcgtgag aggggtatcg ccattgatat 180
 tgccttgccg aaagttcgag accaccaagt acaacttcag tgccttgac atcactgggt 240
 acctcctatg gcgactgtgc ggtgctcatc attgattcct ccactgggtgg ttttgaggct 300
 ggtatttcca aggggtggcct gactctggag catgtcctcc ttgccttaac taccggagtg 360
 gagcacatga tctgctgctg caacaaagta aatgttttga cacatcatgc ttgtttttac 420

<210> 10251

<211> 279
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-E10

<400> 10251

cggggtcgagg cgagggatag atgatgatga caggcgaatg aacagtcagg tgggtgcact 60
ttatccatcc tgccaccata ttacgttacg tatacatact ctatattgac tgctgagttc 120
agaatcgagc ttgtcaaagt tgacagtaca gtatgagatt ttgactaagc tgaagtcctg 180
cggggggcaag tggcaatctt gcatgtcctc aggatgtctc cactattgca tatgggtcca 240
ggccccagtc aatgggtaca tccacatatg catgcatga 279

<210> 10252
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-E11

<400> 10252

cggggtccacc aggacaccct catcgacctc atgctcgctg ccaattacct cgacatgcag 60
agcctgctcg acctgacgtg caagacgggtg gcggaccaga tcaggggcag gaccctcgag 120
gagatccgca agaagttcaa catccgcaac gactacacca aggatgagga gcaggaggtc 180
cgcagggaga actcgtgggc attcaattag aagccgtcta gctatttgct tgtccatttg 240
atcatcactg cgtaggctat ccatcggtcg atccacggct atgatgggcc tggttacctg 300
atcatatgcy ctttctcact cttataaagc aatcaacggg gccgaaatgc ctacctggat 360
gtacaaaagg ggccgccaga cggcgaaaag aaaagcggcc c 401

<210> 10253
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-E12

<400> 10253

cggggtccagc ctgctaccca atgcatgtcg ttaaaaagca ttaattgtaa attttttttac 60

gcctagactt agatgaataa ggatctctat ttaatagaga tatttatatt tgtccatacc 120
 tttttgtaat gagtttataa tcttaaaata aaatatgcta ctgagttggg taccttgaat 180
 gtgggtgcgca ccgtgagtaa tggaatacat agttccagtt ccaaaaatgg gaatccacat 240
 acttatccca tatttttttg atagaattct tttaactata ctcttttaac aagtagacga 300
 gatataattaa cgatctatct aaatgagcga tgtatacttc tgaaaatata ttcataatctt 360
 gcacgtaatt ttcacataat atctacaatc taagataatt ataacataat tattgtcaac 420
 aaaaagttaa gtacaaagta tttc 444

<210> 10254
 <211> 385
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-E2

<400> 10254

cggtccgaaa taccgggtcg agttccacca aagcgataaa catcatctca tcgaaagacg 60
 ggacaccttt gcctctatca agtgggtatca gatttccagg ttgctcgggtg agattttaca 120
 gtttttcgta gtttagatcg agtctgttct tcatacctac agtccacgaa aaagccacaa 180
 aaaaaattag ggtagttca tcatatccga accaatctga gcctttgcat aatcttttta 240
 gggtttttgc tttgttgaat ttgcggttgc atcgtcgtgt caagttgctg gtcttagagt 300
 ctagtctttt agagtttcga gttctgggcc taagttgtca cgccgccgcc gcaccatcat 360
 catcggcttg ccatctacca acatt 385

<210> 10255
 <211> 426
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-003-Q1-E1-E4

<400> 10255

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 aagatgtacg acatccaggc caagaagggt aacaccctga tcaggcctga tggcaagaag 120
 aaggcgtacg tgaagctgac accagactat gatgctcttg acgtggccaa caagatcggc 180

atcatataag tcagagggac ggtcctgcag taggcgcttg tgcgtgggt tcttatgtta 240
 ttggagtttt gtagttgtta cttagcanag gggctcagt gctccattgc ctaccatata 300
 gccgcgact ttcataaatt tgatgcaatc gaagtgaatt gtgttgatgc taatttgaag 360
 ctttgcgttt ggtcttaccg tattgggttg tatctttacc atccttcgac ttaccttatt 420
 tcctgt 426

<210> 10256
 <211> 451
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-F10

<400> 10256

gggtccacgt tgcattggta tgtgtcagta gggttttcaa gaaaatatgt tcttatgtca 60
 cctccataag tgatatggag aagctagagg agaaaacgct gagacgttgt gcactcttga 120
 ggccatattt ctgtcatcat tttttgatct tatggttcat cttttcaacc caagtgaggc 180
 taggagggcc aataaagtac aacaacatgt acccgataga aagatcatcc atgaacctat 240
 tttcttgggtg tcctatgggt tcttccttat ctcaaaaata attcaatata tgttatgtat 300
 atattatata ggaatagtat gaggctaaag gggtttgttc gtaccaaag ccacctgag 360
 gggccaattg cagagggcta tcactttgac gaggccatta cattctgctc gcattattta 420
 caaggatgtg agactagatt taacaaaaat g 451

<210> 10257
 <211> 421
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-F12

<400> 10257

gggtccacga tgcataatgta gtatgacgag gtggccttcc attgccctag aggcgctggg 60
 tcttggtcgt ctctgcatt ggcgtccata ccgtcgatgt cttcagagtc gaagtcgagc 120
 atgccagtta aatcatcgac agtggctacg aagtgaagtgg tgggtgggct ttgaatttct 180
 ttgtcgtccg catcccaacc ttgctgacca tagtccggcc agggctctcc taataaggag 240

agagacttta gtgaattcag aatgtcgccg aagggcgagt gttgaaagat gtctgcggcg 300
gcgaactcca tgatcggcgc ccaattgggt tcaatcgga ggggcgtgga aggttcggag 360
tccggaaagg agtccggcac cttggagtcg cgagcttcgc aaaagacaag actggtgttc 420
g 421

<210> 10258
<211> 179
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-003-Q1-E1-F2
<400> 10258

ggtcgagtc atccgtcaga tgcaaagcac ccagtagatg agaggcagga agatacatgg 60
gagagtgggt tgccccagac gagtgtgcaa tgccctcttca tccggacaata actttttgct 120
aaggaagcag gtcagctcaa agccatttat tggatgtgtc cagatgggtgg gctcacatt 179

<210> 10259
<211> 417
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-003-Q1-E1-F3
<400> 10259

cgggtccgaga taacgggtcg acatcgagcc agatgcgcat gtcaagcagg cgatgaatga 60
gatcaatgca gctgcaagga tgaggggtggc tgcaaacgag aaggcggagg ctgagaagat 120
tgtccagatc aagcgtgccg aggggtgaagc agaggccaag tacctgtctg gcctcggtat 180
cgccccgccag cgccaggcca ttgtggatgg cctgaggac agcgtcctgg gcttctcagt 240
caatgtgcct ggcaccactg caaaggatgt gatggacatg gtgctgatca cccagtactt 300
cgatactatg aaagagattg gcgcgtcctc caagtcctcg gcggtgttca tccccatgg 360
ccctggtgcg gtgcgcgaca tcgccacgca gattcgtgac ggtcttcttc aaagcca 417

<210> 10260
<211> 318
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-F9

<400> 10260

gggtccacac tgaggaagga gggctggctg tcaaccccaa cttctttgtt gatttcggga 60
ccgagcctga aggtccctcc ttggcccatg agatgagata tcctgggtgga gactgcacct 120
ctgacatatg gatctaggag gaaggggtgta ggacacaggc agctggagat ccatgggtgtt 180
gagctcactg taattaaaat ggtctcttcc ccgcctgcgg tgttgatgt gatgtggtat 240
caattggaat aagttcctga tagaacctct gacattggct tcatgggagc tttgggcccg 300
aataagagtt gcctctga 318

<210> 10261

<211> 188

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-G12

<400> 10261

gtcactgatt catcaaagt ggcgcctcc tgtgacgaga ttcgcctgga tcgatctgga 60
gccccatgca cgccactggt ggcagatcca tcatagatcg ccgtacgcgc acgctaagga 120
caccaccagg cacgggtcta tcgttgagga tgatgggtccc tgtctagtga atgattattt 180
cctccagg 188

<210> 10262

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-G3

<400> 10262

ggtcgaaat taacgggtcc actacctgat ccgcaccaa tgggtgcctt gcctcgagtt 60
cagcaaggtt gggttcatct tccgtgagca caacgcatcc cctgggtact acgatggccg 120
gtactggaca atgtggaagc tgcctatgtt cgggtgcacc gacgccacac aggtgatcaa 180
cgaggtggaa gaggtcaaga aggagtaccc tgacgcgtac gtccgcatca tcgggttcga 240
caacatgcgc caggtgcagt gcgtcagctg catcgccttc aagccaccgg gctgcgagga 300

gtccggcaag gcctaaacag ctcaatcacc acgggccaca tataaagtgc cattgcggtt 360
 ttgtcaactc tgacattgct ttgggttttc cttctccatt tatctttctt gtttgttcct 420
 aagaatatgt gtatgtccat gttcatgta 449

<210> 10263
 <211> 398
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-003-Q1-E1-H10
 <400> 10263

gggtccacaa cgccgaggaa gagaggaagg cgatcatgtg ggaagagacg aacgggctgg 60
 tgagcgagta cgcgaagatc catcttggaac agcactcgtc ctgggaaccc gcggttcctc 120
 cccttggaac catggtcaag ggaagcctca gtccgttatg acgatctggc gaagtaattt 180
 cgctgatatt caagctggac gacaatcccc cttggaaccc cccgtttctc ctcttgaagt 240
 caagggccaa caagaacctc tagccctttg ttaaagctgg tgaccgcacc atcgagggat 300
 tgctatcctt ggatggtaat tgtagtgaa ttgtaggaat tcttttcttt gccggagcca 360
 taaggaggtg gtgttcgttc aatgggggct aaaatttt 398

<210> 10264
 <211> 243
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-003-Q1-E1-H11
 <400> 10264

atgaatagca tactctagcc tgccgaggaa gtgacagata aagtacactc tctcgatgga 60
 ttttgggtgtg gggataacat gccctttatt acggagcctg tgggggactt cagcagtcag 120
 gtacctcgcc ttccagagct tcgtgataac ctctcagtg accgaggagg ctgcccacct 180
 accttgggag atggatcccg acataactag aggggtccgt aacaatggaa gaaatcta 240
 cct 243

<210> 10265
 <211> 429

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-003-Q1-E1-H4

 <400> 10265

 gggtcgactt ctcgtggttg ccgatgcgca gaactgcatg ggaggtttga ggagatcacg 60
 ttccaagctg ccgatgaaga gcaatctggt ttgcatgact cagggggcag ctctgatgat 120
 ggatgcgcgc aaaaggagca acatgtcaaa gacaatgaac ccatatgcct gaatggggtt 180
 ccaaagatgg gtagaagagg tctttctgat cggctttgct tcagttcttt ccaggagcgg 240
 tcgtgcccaa ccgagaatta tgagagcgat gccgatcatc agcctaaggg gttcgacata 300
 aagcatgaag tgaagatggc caagtacaaa tcacgggaaa tgggacacct gaagagagct 360
 attcatccat ctctggactt cgacaacacc acgaatggag caagcatgac gaagcctaca 420
 ctgagcaag 429

<210> 10266
 <211> 244
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-A2

<400> 10266

 gcagcaaggc tgctggactt gctggaaact gtggtatacg ttatggtgcc agtttgcgta 60
 tgcagatcat gaggatggaa gtgtctcagc actccaagta cttcagtgag ttctgcggga 120
 agtttgctgt ggtcaggaaa gcagttggaa tttggggatg caaggactgt gggaagggtga 180
 aggctgtcgg tgcttacacc atgaacactg ccagtacagt cacctgtcag gagcaccatc 240
 cgtc 244

<210> 10267
 <211> 432
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-A6

<400> 10267

 ttcgccggtc cactacatca cactacacca ttgtttgggc ctagaggaag gcattgggaa 60

gtaataagta gatgatgggt tgctagagt atagaagctt aaaccctagt ttatgcgttg 120
 cttcgtaagg ggctgatttg gatccatatg ttccacgcta tggtaggtt taccttaata 180
 cttcttttgt acttgccgat gcttgcaata ggagttaatc ataagtggga tgcttgcca 240
 agtaagtaca tgtagcgacc agacctcaaa tggctctgtgc tgctgtgcac cagtgtcatc 300
 cctggatcag taatgctgac acgcacacta caaatggagg atttataaca gattagcaat 360
 cacacacttt ttacatcgaa taactccgaa gagtttaagt atgataaata tggcttaagg 420
 ccatctaata ac 432

<210> 10268
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-A7

<400> 10268

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 ggatatcatt ccaaaagatt ctctgtgag gctttagca ttcaatctgg gctaccttcc 120
 aggaggagat aaacaaataa tcacagtacc tgagacaact gagctggcac tacaagctgc 180
 cagcagaatt gttggctcag ggggactcat aagtgtcctt gtctacattg ggcactctgg 240
 tggaagggat gaactcgata ttgttgaatc atttgcgta agcttgctg ctgatacatg 300
 ggtgagctgc aagtttgaaa tgattaacag gccattgct ccagtactag ttctctaca 360
 caaaagatga tcacaatccc actgaagctc cacaagtttg ggactcgcta ttctggattt 420
 ccggttgatg aatgaaattg cgc 443

<210> 10269
 <211> 340
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-B3

<400> 10269

aggtccaatc tagacaccat ctccgatggg gttcaccacc tccattgggtg cctctccgat 60
 gatgtgtgag tagttctttg tagatcttcg ggtccgtagt tagtagctag atggctttct 120

ctctctcact gaattctcaa tacgatggtc tcttggagat ccatatgac taactctttt 180
 gtgggtgtctt tgttgggac tgatgaactt tgagtttatg atcagtcata tctttttata 240
 tccatgaaag ttatttgagt ttctttgac tcttatatgc atgatctctt atagcctcgt 300
 atttcttctc cgatatattg gttttgtgtg gccaaactga 340

<210> 10270
 <211> 416
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-B4

<400> 10270

gtagatgcac tctcctttct actcgtagtt ggtttctcca tagatagac ttggtgacac 60
 gtaggaaaat tttgaatttc tgctacgttc cccaacagtc gtctcccgac cagttaggtc 120
 ggaaagagga ccccatgac ggttcgcgaa tgggccactt caggcagccc atgacgtata 180
 caaggaagat tccacaagac ttagcgcgca agacgacgac tcttctaaac ctaggcctc 240
 tgatgcatta tataaaccga gactacgcta gtcaatacga catcttatat tcattacaac 300
 aatatcgtgg tagatatcgg tactatacta tccccaatat atgaatataa tctcgaactt 360
 gggtaaaatc atgtgtccat gttgctatcg ctacaagacg cctaacttat gaccct 416

<210> 10271
 <211> 453
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-B6

<400> 10271

ttcgcgggtc gacaccttta atcgaatttt tcagtacaac attgctgtgg ctgctaccac 60
 ggacaagata cttggtgcca ggaatcccgat gatcccatc cgcgagctga gggtcagggt 120
 ctgtttgagg catgatgagt gtctctccat cagccaagct gttgcccgc ccatggcaac 180
 ccacaagctc gatgtcgctg agtttgcgt cctcacggag aagactagtt ggagatgcac 240
 tcaacatgat ctctctcct ttgccaaagc gttcaatact tggtttggtg attgtccagt 300
 tgtgtttgct ggtctcacgc acctgtggct gcggaatttg aggtttgggt aactggacat 360

ccacaacatc ctcaacacct gcaagcgctt ggaatctctg cgtctcaccc attgtgaacc 420
 aggggtccgc tccgtgcttc aagtacagca tgc 453

<210> 10272
 <211> 368
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-B7

<400> 10272

ggtccacgtg gaggtggcag atcagaggag ccggcgaaaa ggtcggccag ggaacgggaa 60
 tagcagctcc accgtctcgt cctcccaaatt tctcagagcg gagctggagt aatgccgtct 120
 gcgtcggcgt cggcgtcgag ccgtcaaggg tgcgggatgt gggatgtctg cccatccgca 180
 actactggaa gaacacgctg gcagcgagcg tctccaagag caagggagga gatgacgttg 240
 cagctcaagg gggccgcact acctgaaggt gagcatggat ggcgcccatt tttcccatc 300
 aaatttgtag aaattcgttg cagagcaagg gacttttgtg ttttaatacag tgggtgaatt 360
 ttttgcaa 368

<210> 10273
 <211> 336
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-C1

<400> 10273

ggggcatcac gtctgcgaca agtataccga agatgattct gcatctacta ctattactcc 60
 acacattgac cgctatccat catgcatcta cagtattaag ttcataagaa tagagtaacg 120
 cattaggcaa gatgacatga tgtacaggga taaactcaat caatatgata taaaccccat 180
 ctttttatcc tcgatggaaa caatacaata cgtgccttac taccgctgtt gtcacaagta 240
 aaggacaccg caagattgaa cccaaagcta agcacttctc ccattttacaa gaaagatcaa 300
 tctagtaagc caaaccaaac tgataattcg aagaga 336

<210> 10274
 <211> 183

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-004-Q1-E1-C10

 <400> 10274

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 atggcttgct caaaacacag agtgacctca actaacaaga gtcccaaggg gatTTTTgtt 120
 tgcaatattt tgatttgatt tgcataaagc atgggactgg gcatcccggt gaacaaccac 180
 ttt 183

<210> 10275
 <211> 312
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-004-Q1-E1-C3

 <400> 10275

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 gcctgatggc aagaagaagg cgtacgtgaa gctgacacca gactatgatg ctcttgacgt 120
 ggccaacagg atcggcattca tataagtcag agggacgggc ctgcagtagg cgcatgtgtc 180
 gtggtttcgt aagtgagtgg agttttgtac ttgttactta gcaaaggggc tcaatggctc 240
 cattgectac catatcgccg cgcaacttca tgaatttgat gcaatcgaaa tgacctgtgt 300
 tgatacacgt gg 312

<210> 10276
 <211> 365
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-004-Q1-E1-C4

 <400> 10276

 gggTccagtg cgaccaaagc aataaccatc atctcatcga aagacgggac acctttgcct 60
 ctatcaagtg gtatcagatt tccaggttgc tcggtgagat ttacagtat ttcgtagttt 120
 agatcgagtc tgttcttcag acctacagtc cacgaaaaag ccacaaggaa aagtttaggg 180
 ttagttcatc atatccgaag caatctgagc ctttgcataa gctttttagg gttttgcttt 240

gttgaagttg cggttgcatc gtcgtgtcta gttgctgggc ttagagtcta gtctttttaga 300
 gtttcgagtt ctggtcataa gttgtcatgc cgccgccgca ccatcatcat cggccctgcc 360
 atcta 365

<210> 10277
 <211> 414
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-004-Q1-E1-C7
 <400> 10277

ttcccgggtc cacctatcat cactgactat ggtgttgcca cgacaatttg ttcaagtga 60
 accttcagtt tgctaaagca tctgcaaag agaacaagaa atcgcttggg ttagacttca 120
 acccaggtcc atctgtcct cgggatgatg gcacccatga tgctgaacc aatattatcg 180
 ggcccttcta caaccttgaa ggtctcatat cacacattgt tgttcagggg gcagccgtgg 240
 agcactctgc agatgacact gattctgatg aagcgcctgc tcctcccaag ccatagaaac 300
 agaagaaaca aaggcttcaa aaccctctc tgcacaaaaa gcttcgcatg ttaagcctct 360
 agctactgca cctcctggaa gcagtgtgca gtccgaagat ctctcatgca tctc 414

<210> 10278
 <211> 390
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-004-Q1-E1-D3
 <400> 10278

ggtcagacc ctacctctac atctatcttc gggattagtt ttagacctga ataattgtta 60
 tttggtgcca gcgttaagca tgaacattat atctggatct tgtttgatgc aagacggtta 120
 ttcatttaaa tcagagaata atggttggtc tatttatatg agtaatatat tttatggtca 180
 tgcacccttg aagagtggtc tatttttatt gaatctcgat agtagtgata cacatattca 240
 taatgttgaa gccaaaagat gcagagttga taatgatagt gcaacttatt tgtggcactg 300
 cggtttgggt catattagtc taaagcgcac gaagaaactc cataccgatg gacttctgga 360
 atcacttgag tatgaaccac ttggtacttg 390

<210> 10279
 <211> 332
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-D4

<400> 10279

cgccatcaag cttacgccgc agaatttgct gcccccatgc cacctccggg gcctggcttg 60
 catactcatg accagcagtc gaggaagaca aggcgggtgct ggtcgccgga gcttcaccgg 120
 cactttgttg cgccttgca ccaactcggg ggccctcaag gtacttgagc cataacttag 180
 ccaaagtcta gctgtatgtg ctactctagt tggcacattc gaaaaatatt ggagtcctta 240
 caaaaatgtt ccacgatgat tgcagttgcc actccagagc aagtcacgga gattatgaca 300
 cttgatggcc tcaccaacta tgaagtgaaa ag 332

<210> 10280
 <211> 286
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-D6

<400> 10280

gggtccacag acaatttgga aggataggat cgatgctcac agcagattga tgaggcacta 60
 ttttgtggag aatctgacat accccgagtc gtacttttgt cgccggttta ggatgagcac 120
 tgagttgttc aggcgcatta cagagaaact aacgagccat gaccggtttt ttcagcaaag 180
 gaggaatgcc gccagagagc tcgggcataa cacctttcag aaggtgacag ccgctttgcy 240
 tatgttggca tacggtatcc cggctgatct agttgatgat cacttg 286

<210> 10281
 <211> 393
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-E1

<400> 10281

gggtccagac tgcattagaa acgtatcctt cactgccacc acagtcgata taaattagct 60

gtccggcaga ctttccaatg aatccggaga aacacggatt aacactttct acaactggta 120
gcgggatgat tctccatctt agcccttctg catcaactat tgccaacca aactgaccta 180
ccagcaagtg gtgtatagct aacaaaatta tgtcaaggag taaggatata accgtaggta 240
attactagta agagatagta gaacagttca atgggtatgc aaggttttag taggtgatat 300
gcatcacatt attcagcggg acacacattg acaatagaag ttacatgcta agagcagtat 360
ataaccaatc gatgcagcaa aagtagttca acc 393

<210> 10282
<211> 301
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-E11

<400> 10282

cgcgccggac ctcggaacgc actaaagtga gtcgtactac ttctttgttg atttcgggac 60
cgagcctgaa ggtccctcct tggcccatga gatgagatat cctggtggag actgcacctc 120
tgacatatgg atctaggagg aagggtgtac gacacaggca gctggagatc catggtgttg 180
agctcactgt aattaaatg gtctcgtccc cgctgcggt gttggctgtg atgtggtatc 240
aagtgggcaa acttcctgac agaacctctg acattggctt catgggatct ttgggcccta 300
a 301

<210> 10283
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-E2

<400> 10283

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acttctgggc ctcttctctc tccgacactg tgtgcacgtg ctcatcgcct ttctagccag 120
aaagattgaa cacgtttatt tctagaggct ataaagtttt tcttcatccg aattgatcta 180
tggcattgga ggacacgtgg tttcccaatc cctgcaaaaa acgatatcta ataacctcct 240
ccttgacgat ctgccatgga gcttttaaaa aaggactact atgctgctaa taacaaaaat 300

taaattgcat taggattcat gaactactta ttttcatctt atatatgctg accttctcct 360
tcttttagtg aaaaatcatg catgtgccct tctgtgtata ttactgttac ctttcataca 420
c 421

<210> 10284
<211> 434
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-004-Q1-E1-E4
<400> 10284

gggtccagtc tgggtgagaa tggacattca cttggaaaga tgggtggaca gattaatgga 60
cacttgaatt atggatttca tggggttgga gctttcaatc cacattccct tctgacttt 120
cgcaacggcc aaagtaatgg tatttcttgc aacttaggca caatatacc cattggagtt 180
aagagcaact ctagaactgc tgaaggaatg gagagcagac atctttacaa agttggttct 240
gctaaccttg gtggtcattc ttctggatcat accgaagcac cggggttttc aagaactgga 300
agctgcccc ttcatggcca ccaagtagcg tggataaatt canataactc gcataccat 360
acctctctc gcatgctatg gacgaactca ggatcattta tcaataatat accatctcga 420
cctcccatgc aagc 434

<210> 10285
<211> 423
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-004-Q1-E1-E6
<400> 10285

ttcccgggtc cacaaaagtg gagccaaaca ggcccagacc aacaacatga tacacaaaaa 60
caaacaatga caagcgaggc gggagataga gcgcttacac gaaaattatg aaactaaatc 120
aaaagaatga caaacttaga cgagacatcg tttaaaatag ttgtggattt aaaaatacaa 180
tatgaaatta taaaaatcaa ggattttacg accaaaaaag aaacaaaata cagaagttta 240
aaacccaaga gaaaaattta gaaaaaacag acaagaaaaa aaacagaata agtgagtata 300

gagagtggcg aaccaggaaa tacttgaaaa aaatgctcgc ctctgacact tccaattctt 360
 tcccgaagca taaagacaaa atatgcctac tccccaaaca tacatagaca ataaagacca 420
 gcc 423

<210> 10286
 <211> 412
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-E7

<400> 10286

ggtccacgga gaagaaacag ttgaacacga tgcgggagat caaggtgcag aagctcgtcc 60
 tcaacatctc cgtcggcgag agcggcgatc gcctcactcg agctgccaaag gtgttgagac 120
 agctgagcgg gcagtcgcca gttttctcca aggcgaggta cactgtcagg tctttcggca 180
 ttcgtcgtaa tgagaagatt gcctgctatg tgacgatcag gggtgagaag gcaatgcagc 240
 ttctcgagag tgggctgaag gtgaaggagt acgagctctt gaggaggaac ttcagtgaca 300
 ctggttgctt tgggtttggt attcatgagc acattgatct tggcatgaag tatgacccat 360
 caaccggcat ctatggtatg gacttcctcg tggttctgga acgagctgga ta 412

<210> 10287
 <211> 227
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-F1

<400> 10287

gaatggcaga aaacagcaat gtaaaatgac agactacgtg gtgacgtcat ttacgccttc 60
 agttccatca tgtgcttgct gctgggcctc gcattacaaa atcgcttgac aatatcatac 120
 agttggattt gttccttcgt agccctgact tcaggctcgt aatcctccgc ggagggtcgg 180
 ttaaactaag ctctgctgcc ctcaaagaac caaggggtgg cactcct 227

<210> 10288
 <211> 434
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-F2

<400> 10288

ttgaataaac ggtcgatttc cgattaatct ctattcctcg gctgactgag acgctaacaa 60
taagcgatat cctcaatatt gacgtaaata aataaccgca ccaaaaaaca ggaacgggtg 120
tggcctatgg cgtcgcccca ttacttgccg cccgcgggca gcatatagga ttggaccgta 180
ttaaaggcat tttctatttg acgcttcagg cgcccattac tgtgtatgtt gcaaacaggc 240
acacaccctc ctctgcgctg cgctggccca tttagcctac ccaaacttgc gactaagtcc 300
atcaaaccgg agatctcctt gtattcgata aatggcacta accaccaga cccaatgcc 360
tattgtgac acttctcctt tttcttcctt ttcttccttt tttccttatt tttttacttt 420
tactttacat tttc 434

<210> 10289

<211> 450

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-F3

<400> 10289

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aaaatgatat agcatgaaag aatcatgtct actaagtaa aagagaaaga actaaaacgt 120
aaagcggatc atgtatagaa agtacgaaga aggtgaatgg taaaaaagag caaggcaaaa 180
tgagagatta tgtggtgagg tcatttacgc tttcagttcc ttcattgtgct tgctgctggc 240
cctcgcatta caaaatcgct tgacaatata atacagttgg atttgttcct tcgtggccct 300
gacttcaggc tcgtagtctt ccgcgggggg tgggtgaact accctctgct gcctcacaga 360
accaggggtg gcactcctaa tggatcctc agataccgta tctgcaggca cattgaaact 420
tgattgccc tgacctcgtg aggacctcct 450

<210> 10290

<211> 273

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-F4

<400> 10290

attgctgagg caagagatca gctccacaag atgctgaatg aggatgagtt ggcgaatgct 60
gtattgcttg tttttgctaa caagcaagat cttcccaatg ccatgaatgc tgctgaaata 120
acagataagc ttggtccaaa acccctgcgt tagccacact ggtatattca aagtgccttg 180
cccaaaagtg gggaagggtcc gtatgaaggg ttggactggc tccccaacaa tatacccagc 240
aagtcctgaa agcttccaat ggattggcaa agc 273

<210> 10291

<211> 358

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-F5

<400> 10291

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catgaaagaa tcatgtccac taactacaac ggagaaagaa ctacaaccta aagcggatca 120
tgtatagaaa gtacgaagaa ggtgaatggt aaaaaagagc aatgcaaaat gagagattat 180
gtggtgaggt catttacgct ttcagttcct tcatgtgctt gccgctggcc ctgcgattac 240
aaaatcgctt gacaatatca tacagttgga gttgttcctt cgtggccctg acttcaggct 300
cgtactcttc cgccgggggt cggtgaaaca cactctgctg cctcacagaa acaagggt 358

<210> 10292

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-F6

<400> 10292

cgggtccacag tctaagagaa aacaggagta tagctgctca taccgtaatt ctctgatgc 60
ggaagtagag tattagaggt atactacata atacatgaat tgtattgtat tgtactgttg 120
ctgtacaaga cgtgttacta cactatccct gtggtctagt caacatggaa tcttcagggga 180
aagtagtaaa gctgagtaca atgaagagaa atgtgtagcc agcttggtgc gcatttttagt 240
gctccaaaat tgtattcttg tcttgcatgg tgctatatag caatcatttt ggaacttctt 300

gtcaatttct tccggacctt aagaatcatt cacatattat actgcagtat actggtaata 360
gctttttaca ctttaacaac tctaactt 388

<210> 10293
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-F7

<400> 10293

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ccagggcata caaaactcat ttcgagcaac ttggctaata caaagcttat gcgttatccg 120
aatcaccttc aaagcgtacg acaatagtgc aagtaactat ctgtcattcg ctatccagta 180
gattaggtgt cacgtcattg acactatcac tgccttcattg tcattgctgc tagaccgcac 240
attacatcat ccgtgatata tcaacagttt gctttattca catcgctcga ccttacgtca 300
cgcacgtatt cttccgcatg aggtcgatga actaccctct gctgcctcac agaaccagcg 360
gtggcactcc tagatgtatc ctcagatacc gtttctgcaa gcacattgaa acttgattgc 420
ccctgacctc cttaggacct 440

<210> 10294
<211> 212
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-G10

<400> 10294

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gtgacgcagc acctgtttcc tgcacgatt gagcagttta caagtgccaa atccccactg 120
gctccggttg ttcacaggtt atctgatcca atagccgccg cagcaccctc ccggtctacg 180
ctaattgtgga acgcccgtg tacgtcatcc tg 212

<210> 10295
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-G4

<400> 10295

ccgaaaagaa aaagattaag gccgctgtca agaaaatgta cgacattcag gccaacaagg 60
ttaacaccct catcatgcct gatggcaaga agaaggcgta cgtgaagctg acaccagact 120
acgatgctct tgatgtggcc aacaagatcg gcatcatata agtcagaggg agggtcctgc 180
agtaggcgct tgtgtcgtgg cttcttgtgt tattggaatt ttgtacttgt tacttaccaa 240
aggggctcac tggctccatt gcctaccata tcgctgcaca ctttcatgaa tttgatgcaa 300
tcgaagtgcac ctggtgttga gc 322

<210> 10296

<211> 397

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-G5

<400> 10296

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atgtttctgc cctatagtca tattcattgc caaaagccac ttccaaggct atcttaccaa 120
ctggatatgc tgacttacca ggcaccaccc catgaaatac tgtagaggac ggcttaagat 180
ctttgtcggc caaattcata cggtgaaaag tatcatacta aaggatattg atactactgc 240
ctccgtccat aagcacctta ctgaacttgt agccccagc ctgaggggct acgtaccacc 300
aaagccagct gccccggatt gccaacctgg ggccggtgat cctcacgggt ccatacaatt 360
ggctgctctg accatcgagg gtatcgaggc actgccg 397

<210> 10297

<211> 249

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-G6

<400> 10297

acggctacag cccaatctac acgccacagg aatgggtctga atctgggtgac cgctacgccg 60
gcggaacgac cgggcttctt atctgggccg tcaccctcgc cggcctcctc ggcgggcgcg 120

tcctctctgt ctacaacacc agcgctctcg ccggctaata gagcatctac gttttacaac 180
 agggccgggt ccctgcttgc atgcacgtct ctgtaatcca catagctacc tcctgtgaat 240
 gtatgcaat 249

<210> 10298
 <211> 144
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-004-Q1-E1-H11
 <400> 10298

cgccgggtcca cgatatccac tcaaatgggt cgtctcccggt gctgatcgcg agctagccgc 60
 aattaagggtc tccccgcggg ctttacatga cctatgactg tgcgcatcta cccattatag 120
 caactatgtg cagcgtgaat ctag 144

<210> 10299
 <211> 347
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-004-Q1-E1-H4
 <400> 10299

ggtccacgag atgacgaaac gcaccaagaa ggctggtatt gtcggcaa atggtacccg 60
 ttatggtgcc agtttgcgta agcagatcaa gaagatggag gtgtctcagc actccaagta 120
 cttctgtgag ttctgtggga agtttgctgt gaagaggaaa gcagttggaa tttggggatg 180
 caaggactgt gggaagggtga acgctggcgg tgcttacact atgaacactg ccagtgcggt 240
 cactgtcagg agcactatcc gtcgtttgag ggagcagact gaagcataag ttgctactag 300
 tgttttgtcc tagtgaatca tctgggattt cgagtttag acgatac 347

<210> 10300
 <211> 426
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-004-Q1-E1-H6
 <400> 10300

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gattttttcg tcttatttgc agcgtaaact atgtatagta atcattagac catctttgaa 120
gatctgacga acagaagcag aatgggttctt tctatactgt tcgaccccc tctccccccc 180
cccaccttgc gttctctcgc agggagtggc tagcgcgcaa cactgccatg ctcctctgct 240
gctccgtcat cacaggggtgg gacggcgacc tcgccttctt gttcattgtt ctgtcggtaa 300
cgacgttctt tgtccaggat catccggaca gggaggtcct ccaggccatg cgtctaggca 360
tgtactgcaa cgccgaccac atggccaaga tggtcgttgc ggcaaccgag ttccgtgctc 420
tccgtt 426

<210> 10301
<211> 346
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-H8

<400> 10301

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ggttaggcaa tgtgttgact ctagacttgg aggggactat cctcctaagg ctgttgcaaa 120
gtttgcagcc gtgcggcat tgtgctcca atatgaagcc gacttccggc caaacatgag 180
catcgtcgtc aaggcgctcc agcccctgct gaatgcgcga gcagcccacc ccggggctga 240
gcatgccgga cgctaagcac cactccggcc ttttgtatga tatagataag gaaaaatgag 300
ccatcaattg ttgttcttgc tgggcacttg tcaggcgggtt tttgta 346

<210> 10302
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-A8

<400> 10302

ggagggagca gttgtatagt gagaacaagg gcgttgaatg ggaatcgcct acatcaaatt 60
tcaagcacca ctgtctggcc aagttcatcc tcgtcggctt tcaagctaaa gactacatgg 120
tgagtcatgt caggcgtgtc ctgaaagcag cgggtgaatct acaggatgtc tacctgtatg 180

atagactggg atgtgccaag tgccaagaga aagtaaagaa tgcgcgcagg tatgatgcac 240
 tggtaactgg catatgcccc ggcgtgaatc tgcctataaa gttcccatgt acaaacgagg 300
 accagcgtgc agtgcagaag cgaatgcccc ggggcattgg gtcacttgcc aaaatccact 360
 tcctgtcatc taataaaata aaggctgaac at 392

<210> 10303
 <211> 413
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-005-Q1-E1-B1
 <400> 10303

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 cctctatcaa gtggatcag atttccagg tgcctcgtga gattttacag tttttcgtag 120
 attagatcga gtctgttctt catacctaca gtccacgaga aaagctaaaa aaattagggg 180
 tagttcctca tatecgaacc aatctgagcc tttgcataat ctttttaggg tttttgcttt 240
 gttgaatttg cggttgcac gtcgtgtcaa gttgctggc ttagagtcta gtcttttaga 300
 gtttcgagtt ctggtcatac gttgtcacgc cgccgccgca ccatcatcat cgcttagcta 360
 gcacttttgc ttatccgcca cggctctgaa tccatatcga tataccacca cca 413

<210> 10304
 <211> 341
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-005-Q1-E1-B10
 <400> 10304

ggagcgcaag acggtggttg ccgatgatac catgccaagt ggccatgagg tgtatgccgg 60
 tgatgccatc tacatctctc tctactccat gggaagaatg gagagcttgt ggggtaaaga 120
 ctgcctcgac ttttaaccag acagatggct cctgggggat agcaacaagc tcaagtatgt 180
 gccgtctaac aagttcttgg ccttcaactc aggcccaagg atgtgcccag gcaaggaaat 240
 cgcagttgtg cagatgaaga ccatcatcgc cgcatcgtg tggaactttg acctggagct 300
 tgtggaaggc cagagcatcc aaccaagct atcttgttta c 341

<210> 10305
 <211> 354
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB31-005-Q1-E1-C10

 <400> 10305

 ggtcgacgtc catgtaaacg atatctagca tcacatcgaa agacgggaca cctttgcctc 60
 tatcaagtgg tatcagattt ccaggttgct cggtgagatt ttacagtttt tcgtagttta 120
 gatcgagttt gttcttcata cctacagtcc acgaaaaagc cacaagaaaa ttagggtttag 180
 ttcagtatat ccgaagcaat ctgagccttt gcataatctt tttagggttt ttgctttggt 240
 gaatttgagg ttgcatcgtc gtgtcaagtt gctggtcgta gagtcgagtc gtttagagtt 300
 tcgagttctg gtcataagtt gtcacgccgc cgccgcagca tcatcatcgc ctg 354

<210> 10306
 <211> 349
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB31-005-Q1-E1-C12

 <400> 10306

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 ctaccagct gtcaacgacg ggacatggca tttttgcaa tccgagatga cattaagtga 120
 cggtgaccgg aatatgtctt aataagctgc caccagtga caccgttgaa ccgtttccaa 180
 caacacaggt ctcgacaatg attcaacggt gggcagtga accgcagaag cccaagacgc 240
 aagcttcgcc aacgcgtgac cggtgacaag accgctcggg aataaacgtg tacgcctga 300
 cagctgacac ggcttcaccg atgggaaggg ggagcacagg caagtggcc 349

<210> 10307
 <211> 371
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB31-005-Q1-E1-C2

 <400> 10307

gggtcgacgc gttggcatgc cgaaagacat gccagctgat ccgcgcatca caattaaaag 60
 ggcagtgcgc tgcagcagat gtaaaggcta tggtcacaac aaagcaactt gcaaaattcc 120
 tatcagcggc gaagccttgc cggccttgcc accagctgag ctctccgatg tacacaataa 180
 ggtggagagt tgctcttgat gttccctgta agcaaagtct gctatttctt tcgttgggaa 240
 cctgcggcat ggtagttagat tctagctcca agttgctctg tagtattcac tgttttgctt 300
 acgctagcga catttgtttg gtaaatacaa cattgtgatg tgaaccatta gagaaacatg 360
 ggaaattctg c 371

<210> 10308
 <211> 298
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-C3

<400> 10308

gggtcgagac acataacgag gcaaactgct aggtcatca acagttagat ggcggaacgc 60
 aagtcgtacg agatcctcct cttccctgat gataggcaca tgccacgcca gctatacgac 120
 cggatctata tggaggagag gatctgggat tttgtcgaca gaagcctatg acagtgggag 180
 aaaattcatc tgtacaaatc tgctgttgcc ctgtgtgact ttaaggtgga tagttgggat 240
 gacatcgtgg acgtcatttc agttcccagc atcctgtatt tatccgcaag tgcacgga 298

<210> 10309
 <211> 427
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-005-Q1-E1-C9

<400> 10309

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 atggctcggc ccagagcaca gctgacatga ctgcttttgt gcaaaatctt ctagttcaga 120
 tgcaaaccag gttccaaacc atgtcagaga acatcatcac gaagatagat gaatgggtgc 180
 aagaattgat gaattggagc tgagcatcaa tgacctcaag gctgaaatgg gcancgatgg 240
 tatgaccct actaaagtga aggacgaaga atcaaagcca gcagacagcc cttoctgagt 300

gaagcagaag tagcagaagc aaggcgtatt agtcgtgggtt ccatgtcgat atcatcagcc 360
 attcatcact aacttactgc atgttaggag atgttatttg cactgggttat atgcatatgg 420
 agatata 427

<210> 10310
 <211> 318
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-D1

<400> 10310

cgggtcgact catttttttg ctcaatcgaa tatgtgaccc cataactcatt atagttgagc 60
 ggcaaggagg gtgaaatgca ccatttttca tctctccaat gattgacgtg ttgcccgaat 120
 cgcaaccgga gctactcat gtgtcgtcct gacctgacct aaaacgtgcg agatctatca 180
 caagcattgg ctctggtgga ttggatgttc atttccgggc ccaaccgac atctcttacc 240
 gatacgtcca gtgtcagctt tgccacatgc aagctaata gaagcatcag aacctgtaat 300
 gcataatgat cggcagtg 318

<210> 10311
 <211> 313
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-D10

<400> 10311

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 gagagcgaat agttgcatgt ctgctactac gcagacaact gcaagtgtca cccaggctg 120
 ttgctccatg gtgttttgtc cggaggggca gttgcatgtg tgccactaag catgcatatg 180
 caagtgttcc cctgactgca actctgtgtt gtttttgttg ggggggagac gttagttgca 240
 tgtttgtcat taagcacaca actacaaatg tggaccata ttgcaactgg atgtgttcaa 300
 tgtgagtgca act 313

<210> 10312
 <211> 393

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-005-Q1-E1-D3
 <400> 10312
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 tggcagaaga ttggtgcttg gatcaatctt ggtgcctact atattgtcgg catcccctcg 120
 gcctacctca tagccttcgt cttgcaagtc ggcgggacgg tacatcaaata gataaataag 180
 aaagaatccc ttttcctgcc ctgaatttgt agtgagttca tatgtgccag tgggtttttga 240
 gtgactgatg ctgtggggtt tatcggtgaa cacgaacagg gactttggct gggcatcatc 300
 tgtggcctga tgggtgcaagt cctgctgctc atggccatca cgatatgcac agactgggat 360
 aaagaagcgg gtaatgcaaa cgacagggta ttc 393

<210> 10313
 <211> 431
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-005-Q1-E1-D4
 <400> 10313
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 acaggcatcc tgagcgccgc ctcaaggcat cattcaaggc atttgaagag gcagagctcc 120
 ctaggctgaa ggaagaaaag ccaggcctaa cactgaaaca gtacaaagat atgatatgga 180
 agctatggaa gaaatcccca gacaaccctc tgaacaaggc aactgagtga ggatacagtc 240
 ccagtttcgt accgattgat atggattcta aggcattcaa tggaaacagaa ctgcagctgc 300
 ctcagtatct ttgtccgtgg agtgaaatga tgtgtggcat agcttgaacc aaataactcaa 360
 gcttctcagc taataatcaa cagatcaatg caatgtatat tctgaggggtt tgctttttgat 420
 tagagagatt t 431

<210> 10314
 <211> 371
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-005-Q1-E1-E1

<400> 10314

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gagggttaatc aaattcaatc taaggagaag attctgccat gacaaagcca aaggccacac 120
aaatcccatac tcaaagaaat atccggagag gatgagctga gcacatgcgc ctgcattcca 180
gatgctctta ccaatttacc atgcaactca acgaccttga atccttgata gcacctacga 240
gagagctacc catacaatcc aatccaatcc aatctgcggc taaccaactg cgccaatatt 300
ttctacgctt cttctacaat ctcagacgga tcgctctgca acaaggatcg acataactgg 360
cgtggggcga t 371

<210> 10315

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-E11

<400> 10315

gaagacctct gttctttccc ttgcgcacga acagcccctc cgacggcggc gaggggggcg 60
aattggcatc ctccctcctc gactcgacgc gcgcgtaatc cgagactacc ttcaagagga 120
caagatgctg tggcgcacga ttcgcagtat ggaggtgatg gcgcattctt ctagtttctt 180
tcttccgaaa ttgcatcagc ctgccaagac tccagcaaac aactatactc tggttgttct 240
taaccagcag cttccacggt tcatgcctcg cctctgggct caagagcagc aaagatgaga 300
atatgtgctg atggtggagc caatcgtatt tttgacgaga tgtctcaaat gacaaatgac 360
ctggacagaa ataggtatat tccagaaata gt 392

<210> 10316

<211> 331

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-E3

<400> 10316

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aaggatgagg gtggctgcaa acgagaaggc ggaggctgag aagattgtcc agaccaagcg 120

tgccgagggg gaggcagagg ccacgtacct gtctggcctc ggtatcgccc gccagcgcca 180
ggccattgtg gatggcctga gggacagcgt cctgggcttc tcagtcaacg tgcttggcac 240
cactgcaaag gatgtgatgg acatggtgct gatcaccag tactttgata ctaggaaaga 300
gatcggcgca tcttccaaat cctcgggcgg t 331

<210> 10317
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-E4

<400> 10317

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gttgcaggct tgggccagtt gttagtgaag gacagtatga gaagatcaag aagttttag 120
cgaatgctaa aagtgaaggt gccaccattc tgactggggg tgtcaggccc aagcatctgg 180
agaaaggttt cttcattgaa cccacaatca tcttgacat caacacatca atggagattt 240
ggagggagga agtctttggt ccagtcctgt gtgtgaagga attttctacc gaagaggaag 300
ccatcgaact ggccaatgat actcattatg gtctggctgg tgccgtgatt tctggtgacc 360
gtgaccgatg ccagagatta gctgaggaga tcgacgcggg gtgcatctgg gtgaactgct 420
cgcagccttg cttctgcc 438

<210> 10318
<211> 335
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-F1

<400> 10318

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tctatcaagt ggtatcagat ttccagggtg ctcggtgaga ttttacagtt tttcgtagtt 120
tagatcgagt ctgttcttca tacctatagt ccacgaaaaa gccaaaaaaa aaattagggg 180
tagttcatcg catccgaacg aatctgagcc ttgcataatc ttttctgtat ttgcgttggt 240
gaatttgagg ttgcatcgtc gtgttcagtt gctggtcgta gcgtcgagtc gtttagagtt 300

tcgagttcgg ttcacaagtt gtcacgccgt cgcgg

335

<210> 10319
<211> 356
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-F12

<400> 10319

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aattgactta ctacacccca gagtatgaaa ctaaggatac tgatatcgtg gcagcattcc 180
gagtaagtcc tcagcctggg gttccgcccg aagaagcagg ggctggagta gctgccgaat 240
cttctactgg tacatggaca actgtttgga ctgatggact taccagtctt gatcggtaca 300
aaggacgatg ctgtcacatc gagcctgttg gcggggaaaa cagccaatgg gtctgt 356

<210> 10320
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-F8

<400> 10320

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taatggaagc ttgccttccc atagctggcc taatctaggt tatcagaacc ctgcatctat 120
tccagcagca gcaccacaaa atggtgtcgc caaggctggg aacaacaatc aggacttctt 180
ttctgggaac ttcggttttg gttcgcccgg catgccagca aatgggtcca caaccgcagg 240
tgctaacaag agcgcattcca cccctacctc ttctaccctg ccctctcaat caggcaaaga 300
gtatgatttt tcctcattaa cgcaaggaat gttctcgaag cgatgaatgg cttgaaatac 360
ttggagatgg atgaggcctc cattgggcg 389

<210> 10321
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-G1

<400> 10321

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aagaagtcca aacggggcaa gtcaaagcac gcaaagaacg ttgctgcgca acgcaatgga 120
gccaacctgc cgcaggaaaa gccagcaac gtccttctt ccagcagcga gcctgaggac 180
aacgcagcac tggaagactg ggcagctacc cggattcaga acgcgtttcg gcgccacaat 240
gcaaggagga cgctccgttg cctgagggga gttaaaagac tgcgcattgt tggccagagc 300
aatccagtta ccaagcagac cagtgccaca ctgagctaca tacagtcttg ggacaagtta 360
cagggctgag ctaagaaaag cggcgtgctt tcaaggtcac cgaacggcgc accaggaa 418

<210> 10322

<211> 418

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-G10

<400> 10322

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ttgcctctat caagtgggat cagatttcca ggttgctcgg tgagatttta cagtttttcg 120
tagtttagat cgagtctgtt cttcatacct acagtccacg aaaaagccac aaaaaaatt 180
agggtagtgc catcatatcc gaaccaatct gagcctttgc ataattttt tagggttttg 240
ctttgttgaa tttgcggttg catcgctgtg tctagttgct ggtcttagag tctagtcttt 300
tagagtttcg agttctggtc ataagttgtc acgccgccgc cgcaccatca tcatcacc 360
tgccatctac caccaccgct tttccgccag cgcttcgaat ccgtaaccat ataccaac 418

<210> 10323

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-G3

<400> 10323

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ccttgagggtg gagtcgtctg acaccatcga caacgtcaag gccaatgatcc aggacaagga 120
 gggcattcct ccggaccagc agcgcctcat ctttgccggc aagcagctgg aggatggccg 180
 cacccttgct gactacaaca tccagaagga gtccaccctg caccttgctc tccgccttag 240
 gggaggcatg cagatcttcg tcaagaccct caccggcaag accatcacac ttgagggtga 300
 atcctccgac accattgaca acgtcaaggc caagatccag gacaaggagg gcattcctcc 360
 ggaccagcag cgcctcatct ttgccggcaa gcagctggag gatggccgca ctcttgctga 420
 ttacaacatc cagaaggagt ccaccct 447

<210> 10324
 <211> 341
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-005-Q1-E1-H1
 <400> 10324

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 cgtttgtaac tttgggacta aacaggaaaa gaatgctggg ttttgagcaa tgttgggact 180
 aagtacagca cattcagcat gtatgctttc tcatatcgaa tttatgcgcc gtggattaat 240
 tcactcactg tgataagaac gttgctaatt gtgcctttgg tggaacaggg ttactaattt 300
 aattgttgga gaattgtatt tccaagtcgc tccgaagtgt g 341

<210> 10325
 <211> 378
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-006-Q1-E1-A11
 <400> 10325

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 agagccatct accaatgtgg tcttagctga tcatgttacc acgaagaaat ggtagcaagt 120
 tgttgatttc gacgaccacc tcgatgatat cagcaagtaa gtggaagagt ctacaagtgt 180
 catgaagcta tagtttgtaa taccacacaa agaagttgta cttctttttta ataaccatat 240

tgagtgcttc ctttcctctg tttacattat ttccccttgc atatttgcag ggactgggtg 300
aacgcaagcc tgcttggttg acacgggttt gagatcaact ttgtcacata tttatttgaa 360
ctggctagaa acaaggca 378

<210> 10326
<211> 406
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-006-Q1-E1-A4
<400> 10326

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acatcgacag catgaatgaa gatgcaggag ataccgacga accaacgccc atagggcatt 120
ggacagccac ctcatctcac gatgtgtaca tgggtgatac ccctaaagga agcgacaacg 180
aggaaaaagg ggatgggacg ggagatcgac ccccgaaaa gcaatcaaag cgtcggcgta 240
aacaccgacc caagccctgc ctcaacaaaa acccagccat agagcaagac gagccggtaa 300
acgactggca tgcttttagag caaccgtctg aacaaggaaa cacgtataga gaaaccgaac 360
atccctcttc gggcgaaaac ggcgacctca caccacataa acctac 406

<210> 10327
<211> 441
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-006-Q1-E1-B1
<400> 10327

gtcgacggac cgtaattac tttgattgaa tatgatcctt ttcattggta tgaaactgaa 60
actattgtgg cacatcttac taagttgaat gatatagcca ccctttttac tcatgatgag 120
aaaactcgat actactttat tctcaaatta tcccctttct cattaaaggg ttatgctaaa 180
gcttggtaca atattcttgc tccatgttgt gtgcgtagtc cccaggatat gatttattac 240
ttctagaaaa aatattttcc tgctcataag aaacaagctg ccttacagga aatatttaac 300
tttgtgcaaa ctaaagaaga gagtctccca caagcttggg ggaggctttg ccagttactt 360
aatgctttgc ttgatcatcc tcttaagaaa aatgagatac ttgatattct caataatggg 420

acaaccgatg cttctcggga c 441

<210> 10328
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-B3

<400> 10328

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tgggggacaa tccaacaac aattgcaggt actttagcgt tgtctctatg attcatgcat 180
gagttgctgg tgttgtcatt ttcaattcag tggtatatca tttacaatc acaatccagt 240
cagtaggcct ggcggaaagg aattaagatg tacactggca agaagaagat ccagaaggac 300
aagggcgctg agacctctga attcgaggat accatcgcg aggggctcac cacaatcac 360
ttgcaagaag ggctcagttc gaaaactaag gttatgcttc accaaggatt tgaagggtcc 420
ctcgccgtgc cgtggacacg attcaaccat g 451

<210> 10329
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-C1

<400> 10329

tccagaattc tagggtcgac gagcagacga cagaaggggc ttccggtcac catcggagcc 60
ggcgaccggt ggcagccgcy cggggacgcc gcgcgatctc ctacccccac ccccatccca 120
gtctaccaca gcgacaccgt gtgagatccg tgcacatcg gtaggctcag ttggtgcctt 180
ggtggactag tgaagtgaac ctgtatcaat atcttcaggc tctggttcaa tggcctacga 240
gatcagttag atcaaaagga tctgtacctt tcttccttgg tctctttctt cgatttgcga 300
gatggcctgt tgctggtata atcctggaac tgtatggatc ttttgcctc ttcagtgggt 360
acggggctcc tatccaagcc ttcctatatc agattccaat cattggatgg attctgcaat 420
accctttca gc 432

<210> 10330
 <211> 413
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-006-Q1-E1-D1

 <400> 10330

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 ccgcccattct cgtttggggc cggtactaat ataatccggt caaaattttt ggccttattc 120
 gaatttgctg ctcgggcccat ggtccaaaaa agctgcaacc gagcctttct aggggaactc 180
 ctatacgccg cattttgccg cgagtagtcg ccctttcgca cagagccagc tcacctgggc 240
 cggcccattt gctgtaggga tgggaaatca caaaaataaa aaggctccag caatacgact 300
 caaacacaca acctttcagt aagggtgcgc ttgcgctagc cacctcaact gactacctca 360
 catgtaaact tggcatcgcg aatattaaag aacctagcta taaaacttaa aaa 413

<210> 10331
 <211> 345
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-006-Q1-E1-D10

 <400> 10331

 cacaggtcta ggactcgccg gtcgacacgg ctggcgaaga tgagtcatgg gaatgtgcgt 60
 gtgggagaca cataggcaca tatatatatg tgcgtataga gggctagtag agaccgtgcg 120
 tgtgtatata tgcattgtgag agaaatagtg ttttccaact aagattagtt aaaagagtgg 180
 tacatagtag tcagaaagag agtgagagag agggatacag agagagcatg tgcgtgagac 240
 tccccgacac cccaagagag attgtgagca tgtgtgaaag agaaatgccg gtgcatataa 300
 agtgtgtgca cttatgcggg agatagagag atatacaacg cgttt 345

<210> 10332
 <211> 443
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-006-Q1-E1-D3

<400> 10332

tccagaattc tagggctcgac agccaaccag atgcgcatat caagcaggcg atgaatgaga 60

tcaatgcagc tgcaaggatg aggggtggctg caaacgagaa ggccggaggct gagaagattg 120

tccagatcaa gcgtgccgag ggtgaagcag aggccaagta cctgtctggc ctcggtatcg 180

cccgccagca ccaggccatt gtggatggcc tgaggggacag cgtcctgggc ttctcactca 240

atgtggctgg caccagtgcg atacgacagt gatggacata ggtagctgca tcacgccaga 300

tatctattga ccactatgaa ttgagattgg agcgtcctcc atgtcctctg cggtgttcat 360

cccccatggc cctgggtgagg tgccgcgacat cgccacgcag atccgtgacg gtcttcttca 420

aggccagtct gcctctgaca act 443

<210> 10333

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-D5

<400> 10333

actcgcgggt cgacactgat caccaagatc cgtcatgctc catactgatg cataacaagg 60

ttctctcggg ggttgaatt ttgcaagatg aagttgatcc tatggtttct gtcataaag 120

ttgagaaggc acctttggag tcttatgccg acattgggtg tttggatgcc caaattcaag 180

agatcaaaga ggcagtggaa cttcctttga cacatcctga gctatatgag gacattggga 240

tcaggcctcc gaatggagtc atactatacg gggaaatctg aacagggaaa actctacttg 300

cagaggctgt tgccaattcg acatcagcaa cattcttgcg tgttgttggg actgagttga 360

tccagaggta ccttgggtgac ggacgcaagc ttgtaagaca actgtttagg gtg 413

<210> 10334

<211> 370

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-A3

<400> 10334

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tcggtgatat ttgacagttt ttcgtagttt acatcaatgc agttcttcat agctagagtc 120
gatgatcaag gcaatcatca ttagggctag ttcattcccat ccgtgccact ctgagcattg 180
cgggacctt tctgtagttg ctttgtcgaa tttgcggttg cattctcgtg ttcacatgct 240
gggctgacag tcgaggctgt gatactttca agttcagtat acagggttga aggccatcgc 300
tgcagtatca tcattctggga tgcgatctat caccaccgct ccgcatccgt atccatatac 360
caccaccaat 370

<210> 10335
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-A4

<400> 10335
tccggtgggc aaaggcggct tttaagcaga ggatgtggga gtgttggcca catttggttt 60
tcgacttggg tgtctaaata ttctcaccat acttggctcc ctctcggcct ttgcgtcatt 120
ggcgcaacga gtcatttagt taacattcaa tgaagaaagg tatgtgctac tttgaagggt 180
tagggtttag ggttcatggc ccagatccaa caagtgtagc tttcgagagt gtgtactgaa 240
accaagtgtg gtgttgggtt ctgtgaatag acatgaaaag agaagatcgc ttggagcagt 300
ctgcagggtt ttgtctcatt caccatgta tgtatataca acagttgttg ctggagataa 360
ttgtatctat aatcctcata ctgcgcggcg acgtccaact ca 402

<210> 10336
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-B1

<400> 10336
gtacttgtca aagcttcccg ggtcgacagg taatttcaat cattattaac tatatgtcgg 60
cctctttaat tcgtcatttc ctgatatcaa ctatttaata actcatttat tcattttctt 120
tgccggcggg cagggttgg gaaaatttca tcaacgtgac tccaggccaa tggcgaaaaa 180
atgtgtattg gtttcgaccc aaggtaagta attaatagtagt actagctagc taccatctct 240

ttaattcttg tttcaatact attaattgtc atgcttgatt aattattatc tgattaaatt 300
ctattctcgt aaaggccctg aagcaggcgt cggggactga agtgtgtgca tactacgttt 360
gcgagaacat tcgcatgatg gcgtccgaaa ggagcaaattg tgatagacag ctatgggtac 420
gtttgccaga acactattca caattttttac atca 454

<210> 10337
<211> 242
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-007-Q1-E1-B12
<400> 10337

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cactagtttg ccccatcatg agtgtttcaaa acctcttctt ctgacaatca gtttgtgtgt 120
tccgggtgac tgagctctaa acctttttatt gattgggtcc acatggctgg tcacattttg 180
gtggtcttac gtatttgcaa caactaactt catgcatcag ttgcactcat cctctttggg 240
tc 242

<210> 10338
<211> 406
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-007-Q1-E1-B3
<400> 10338

tacatttcag tggccttcat tcaaattgctc aaggctttga tgctgtggc gacatttata 60
atggcogttc tatgtggtac tgacaaatta agacgggacc ttttcttgaa catggtgctg 120
gtcagtgttg gtgttgtagt ttcattcatat ggggagattc attttaattg aataggaaca 180
ttataccaag taactggcat tgttcggaa gccctcaggc tggctctgac acaggctctc 240
ctccaaaaaa agggattaac cctgaatcct attacaagtc tgtattacat agcgcttgc 300
agtttcatct tcctatttgg tccatggtat ttactggaaa agccagaaat ggacatctct 360
ccaattcagt tcaattattg gatatttttc tcgaatgcac ttgctg 406

<210> 10339
 <211> 400
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB31-007-Q1-E1-C11

 <400> 10339

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 acctttaaat cttgcctcat attcaaagac ttgattttgg agatcataga tttgtctttg 120
 cagaaagttg atttgctcgt tgagggtgaa gacgacgtcc ttcattggact ggccatccac 180
 cttgtgatca cgggtgaaat atgtaatcat gaggtgattg gcgttgagtc cgcgctccac 240
 catccccttg cacttgagga cctcctgctc catggcttca agcctggcct ccacgggtccc 300
 cttccccttg ggcccctgga tgtctcggat gtggagcacc cctcatgca tctcaatggc 360
 ttgagcgtgg tgataatccc aagtgaagg aatcatcgta 400

<210> 10340
 <211> 443
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB31-007-Q1-E1-C2

 <400> 10340

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 gcaacttgga aaaaaagtct agccccattt gtgtcgagag cgggcttgca aaaaagacaa 120
 aaatggttgg ggccaatta agaatcgagg gtggactttc aactgggaca aaaaaggtcg 180
 gagccccgtc gtgagtcaag ggtagacttg caattaggat aaaaagtgtc gagacccggt 240
 tgtgagtcga gagtgaatt gcaacaggga aaaaagggtc gccctagtt gcgactcaag 300
 ggtggacatg aaactcgtac aaaaaaggct agactccagt tgcgagttga ggggtggactt 360
 gcaactggga caaaaaaag tcaggtccta gttacaagtc gatgggggta ttgcaactgg 420
 gacaaaaaag ttcgggcccc aat 443

<210> 10341
 <211> 440
 <212> DNA
 <213> *Triticum aestivum*

<223> unsure at all n locations
<223> Clone ID: LIB31-007-Q1-E1-C3

<400> 10341

ccgggcccag acaggtccca gactaggcgg gatagaaggt atcctgagga tgagcgcgac 60
agtcatcatc gccgtcgagg agaagagcgt gctgcccacg acggcctctc acgctctcgg 120
ttgcaaggctc ggataaaact tccaggggag acatcacttg acagacttgg cccacaccca 180
cacctagaga aagagagagg gcatagagac aggttgtctc caccaaagca aacagacctt 240
cgagcaaagc ttcatgatag gctaaaggct agatcgaatg aggagggtccc tggtaacctg 300
aagagttcag tggtaaaagc aagtagtggt gaggatgctg ggggtggtgaa cttttctggt 360
ccaaagagcc ttgcagagtt gagagcaaag aaggctgctt acagatcagg aganaaact 420
gtcaagaatg ctggcogtgt 440

<210> 10342

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-C4

<400> 10342

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agcgttggcg gcggcagggc ctcggtcacc gttgagaaat aagcttggct tgcagcagca 120
ggccaaccgt cgccaagtga tctaataag ccggcggcag agaatttttag cccgtggtat 180
tttgggtagt agttaattta gcacaagata ttttgagtag ttaattccgg atgatggtgc 240
tggtatctgt tagatagttt gagtgtgcct gtcctttagt ttcttgaaac attgtcgtct 300
gccctagtgc aaattcgaag taactataca ctccaattgc aaattataaa tatatatgtg 360
cctgagttat cgccatgttt gtcacgcgat ctctca 396

<210> 10343

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-D1

<400> 10343

tcccgggtcg acaaacccta gacgatgtag ttttgaatta tgaacgtagg atatgtcgtc 60

atcatcatcg gacgacgaaa gtctccggca gagtgcgaact ggtgccacga cgatcgaggt 120

ctgtgcgaca tgcctcacct ggacgatgat cggcgcttca gcattaagct cgaggagacc 180

ttcgaagttg aaacggtaca caacgacgac aagtgttatt ttcataatta agcatgactt 240

caactatttc aacgtgtaat tttcatcttt tacaattcga gtatagctta tcccatgccca 300

tgcaagacgc tatgtcttgg agaggatgga ttttgaagac catgaaattt ctgaaacaaa 360

gaaaattcac ctaaggactc atcacgatgt ggactttgaa gtaaattctat ataattctga 420

gagcgtaacc cat 433

<210> 10344

<211> 454

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-007-Q1-E1-D3

<400> 10344

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agaagatccg tcccataacc ttttggagtc ggtggetcaa tcgattgccca acaccacgct 180

gctcaagttc cctcagatct ctgctgtccg agtgaaggtc gggaaacctc atgtcgcggt 240

gcanggcgtc gtggactact tgggagtgga gatactgagg cacagaaagg catgagcttg 300

agcagaactt catttgggaa agcctggcca aaatgcccc tcagaattgc agttgagctg 360

atttctgtgt ctcatctata aacgtgctgt tgattgtcct gttactcttc ggctgatgct 420

gaaattgccg caatcacggg aaaaagattg atag 454

<210> 10345

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-D4

<400> 10345

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 tgttcactca gtcccaacct gtgtgttgga gtgggtgaga caagatttta atgactaatg 120
 actacgtgtt tcattaataa atatacacac agttttgata aaaaaatgaa taaatatatt 180
 ttagcatcag cagaatggta atattatcca tgatattttg ctattccaca cttacatctg 240
 tctgccatgg gttcctgaaa gacaaacaat tgtgattgaa cagaggaaga gcacatcact 300
 ctactcaat ggctggcttt ggcattcttt aactacacc tttgaccaac accatcccat 360
 cgtttctcaa attctgtgta gcaaaatttg ctcggtgtat tggtttactc taatatctcg 420
 gtaaaaaaag ggtatggag 439

<210> 10346
 <211> 443
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-007-Q1-E1-E3
 <400> 10346

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 gccgatatcc tcgccctcac tgcccgtagac tcgactgtcc ttgttggtgg cccttactgg 120
 gacgtgccac tcggtcgcaa ggactctctg ggtgcagtgc atccactcga tcatacaatg 180
 acatccctgc cccaacaac accctaccca ccatcatcac taagttcaat cgccctcggtc 240
 tcaacatcct ccatgtcgtc gccctctcaa gtggtagac catcggcttg tctcgtgca 300
 ccagcttctg gcagatgctg tacaaccagt cagacaacgg tctggccgac agcacactgg 360
 atatgtccta cgctgcgcaa ctaaggcagg ggtgccaccg catcgggtgcg tacatcaatc 420
 tcttcgcact ctacgtcgtc agc 443

<210> 10347
 <211> 230
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-007-Q1-E1-E4
 <400> 10347

cagcaggcat tcattctcgg atctgcatga actactacgc gatgagtga ataacaccca 60

caacattcca tgcattgtctc agtcaacccat ctctaacttt acatgcagga aacatgtggg 120
 actgcatgct ccatcatatt gggcgagtgt tgtcatcact aagtcaagtg agggcaatat 180
 gaactctaac gacttaagct ctacctcgat tatgacatca catatatatta 230

<210> 10348
 <211> 272
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-007-Q1-E1-F10
 <400> 10348

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 ggcgggggaga cacagagcct gggatgggga ccattgtcgt agggatcgct gagtcgcgtg 120
 gggaggcgga gacgtgccgt gggcaatcct ttggtgcctt cagtggcctc gagaatgggt 180
 ccctctttgc cttcagaatg gctgtactgc taggaagctg gatgtaaaag gtagtgaggc 240
 cgtagtagtact ccatgggtca gtcccatact gt 272

<210> 10349
 <211> 437
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-007-Q1-E1-F3
 <400> 10349

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 aagaattgggt gttttactgg tttttacggg gagcccaggg tggccaatag gcatcacagc 180
 tggcagctct tacgtacctt attttttgtc caacacgaag catgcatctg tatgggtgat 240
 tttaatgaga cgcttcaggg ggacgagcat tttggagcca acgcaagacc ggagaggcaa 300
 atgctgtgctt ttccgggaagc agccgcggac tgtgcactcc ttgatgtggg gtggcggggg 360
 gtccctttca catgggataa caagcagcag gggaacgcga atgtgaaggc tagactggac 420
 tgtgctatgg tcaactc 437

<210> 10350
 <211> 401
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB31-007-Q1-E1-G11

 <400> 10350

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 acgtccatg ctctcccaa cgctcctctt gctgttgggg tttctctgcg tatttgctat 120
 cacacgacta acctgccctc acgccagatg gtctagcggt ttccacagtg gttccactga 180
 aaccgtccta tgcgtccggg gagcagatcg tcttctcctg ccagcctgtc tacgtgtcgc 240
 ggggaaggat ccggcagttt acatgccctc tcaaaggact ctggctcatc agcactctga 300
 aatgcacgcc catattatgt cgttttgggt gggatgttag tccacactga cggtagccta 360
 tactgcgttt gcctatcgca acaccatgcg cttttcttgc c 401

<210> 10351
 <211> 461
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB31-007-Q1-E1-H1

 <400> 10351

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 tgactgtgac atagatatga tgagtcaacc atatgacgta tcgggctatc agcatgctaa 120
 tgaggatatg gatgatatgc gccggtagga aggtcgttgg aaggattgca aaaagtctct 180
 cttcatgaat tcctcacaga acacgcctgg agatgccacc tcaacacagg ctcaactagc 240
 cgggggtcgt acagtgttta gcctgggaac cctggggtaa gggtaagga agggctctgga 300
 aggtgtgccc aagaaaaagg agatgaagag attgcggaag ataactgcct ccaaacaagc 360
 cagagcacat aacagccaga agattgattc tgaagagcgt gcacccgtga aagggtgcgt 420
 catgttccat ctcacgggag agccgatgct accgccgaaa c 461

<210> 10352
 <211> 218
 <212> DNA
 <213> *Triticum aestivum*

<223> Clone ID: LIB31-007-Q1-E1-H12

<400> 10352

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caacgtatcc atttcccact gatcggttt actactctct cgtgtacgc atagcgcaca 120
gggtgtcctct cattcctgta ctctcagatt tgggcgttcc actccaactg cgacgtctgg 180
ttgtctgaga ggcattgatg ccccgagttt gccccggg 218

<210> 10353

<211> 354

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-H4

<400> 10353

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tgccttggtc atccccaagc ttgaactttt gtgtctcctt aattcctctc atatcatggg 120
ttctcttttt agcaaaagct tcattcaca taaactcaac aagaactcgt cagatagggt 180
agtataaacc aatgcaaaac cttatcattt tctactgtaa caaatcacta tattattatt 240
ccacattaaa tactaaatgc ctctgcatat ttaatactcc tatcatcaaa tagaatcagt 300
aaacaagcaa acatatgcaa acaatgcaac cataacagca atctgccaaa acag 354

<210> 10354

<211> 309

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-007-Q1-E1-H5

<400> 10354

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ctacacttca cctatagcta ctccatcttg tcgttatctc ttccgacggg tgcttcctcg 120
gggggtctcg gactctgagt tctattcaca tccgtgttta gatgtttctt tgcgtgttca 180
cttcatcccg ccactttatt ttccctcatc aggagacaat tgcactatca ctccctagat 240
tccatcttcc ttacatctcc acttccaata gtcttttgtc ctaccaata cgttcagata 300

cacttctgt

309

<210> 10355
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-A10

<400> 10355

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aacaagaatt gacatcctct aatgctaact gttgaccatt cttctctgaa gtatcagagg 120
tgtggattgg aatcagtttt ttttgctgca cccccattcc gacgaggtca cgcacacata 180
ccaccgggaa tcccacgaac cctatgttcg agcgcgagcg acggcaatag catctgcaag 240
tacttgacca acacgetacc cgggtgtggt atccactatt gaggccaaac aacctagctc 300
ggtcacacctt aagtgtgctt gtgtccagca cctgatgaag aacgggagaa gattgctgac 360
tttgtgccta atgatggttg cctgaacttc gtagatcaaa ttgacgacgt gttgattgct 420
gaattt 426

<210> 10356
<211> 353
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-A5

<400> 10356

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gtgaatctac tcatgtcatg tgtaacatcg gtactatggg ccaacatggc tcataatgga 120
tgcacacatt tgcagcccaa tccgacacaa ctagaccata tccgagcttc taggcaagga 180
agcagctgct gtccacaaca agcatattta acacctgatg agcaaacata ctcaagtcca 240
cattccgaat ctctacacta tcttcactta catcgtaaat gcaccccta ggagagctgt 300
ccaagcagtc gatctgcttc aagctcaagt tgaaaccttg ctgtgacgcc tcc 353

<210> 10357
<211> 399

<212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB31-008-Q1-E1-A8
 <400> 10357
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 ctatcattgt catgtcgccg ctgccatata tcaccaccgc atcatcatca tcgctgctgc 120
 cagggaccac gaccgcacca acttcatcgc tgctgcgata taccaccacc acatattcac 180
 cgccaatccc aatccatata cgccaccaca tatccgccgc catcacacca atccgagttc 240
 acctgcaaca tatatccgcc acctgtccgc gttccatcag attcatctcc cccaccagtc 300
 ctactccaag tccagtatct tggtactcta ttttgatctt ccagatcact ccatactccg 360
 agtcctgaca gagaacgact ccaaaacttc tgtgttacc 399

<210> 10358
 <211> 350
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB31-008-Q1-E1-A9
 <400> 10358
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 aatcatgtag caaaaagcta gtatggctca tagtcatgaa attatttccc ttgatttctt 120
 gcttagttac atgcacatat tagataacaa aaatttgta aatcggtccag agggaaaatg 180
 gcgaagagaa aactgttgg cctactactt gtccttgcaa ttatgttctc ctacaatgtc 240
 ttggagggcg gtgcacacca gagccaagtt gtattctctc gcaaagtgac gaatgcagag 300
 cacaagcat cctttagcgg gatgacttca tcccttggtg ggcgtgtttc 350

<210> 10359
 <211> 380
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB31-008-Q1-E1-B10
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cagcagctgc ttcatttcaa tggcacggag atgaacaatg ctgagaagct cagcgccatc 120
ggagtccatg atggtgatcc tgtgatgatg gttgcctcca ataatacgac atctcatgat 180
attatgaggt taaatcctga tggatcggca gtatatcctc aatctttcca acatcatatt 240
cttggcgatt cagaacttat tgcgcaactc cttcaaaatg acccgtcatt agctcaatgc 300
atccttggtg atgacaccac tgagttgcaa cacagcttgc agtcacacca ccaataacga 360
gtacaactga gtcgcataca 380

<210> 10360
<211> 291
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-B11

<400> 10360

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gaggatctac cagatgcagg agtcgggtac ccgcctcttc gtcgccatca atgtcaacga 120
gtccgtcacc aagagcaagt ttgacaagct ttaccgttgc cgtcactcgc tcaactgatgg 180
tcttatgaag gccactgatg ttatgatctc cggcaatgtt gccgtggtct gtggctatgg 240
tgatgttggc actggctgtg ccgctgcact taagcaggct ggtgtcagtg t 291

<210> 10361
<211> 251
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-B3

<400> 10361

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caacatgata agatgggtca ctggggatac ggggtggcctc tttaccaccg tgaaggatgg 120
ggagtattatc actgggaatg ctcaccatct gatagacctt gctagtcaag atatcaagaa 180
caatgtccaa cacgttgcca acaggcgtgg taagcacact agcaatcgtg atatgcatag 240
atctgcagct a 251

<210> 10362
 <211> 375
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-C10

<400> 10362

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 ctcttgcctt caagtacaac caggagaaga tgatctgccg caaatgctac gcgcgcctgc 120
 acccaagggc tgtcaactgc cgcaagaaga agtgtggcca cagcaaccag ctgaagccca 180
 agaagaagat caagaactag agtgctacta gtcagtttca tggaccgggt gaaccattg 240
 ctgtgttagc gtttatgcta ttgtcgtcac gatgtcgatg aaccttactt tactttgctt 300
 tcagccacca atcgtttgtg tgatgataac tgacagtatt ggtatatggt agcaaacta 360
 taattttgcc gtaaa 375

<210> 10363
 <211> 433
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-C11

<400> 10363

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 aaacaccacc tcttttacct gctcgcagaa atggacaaga gatacccggg ccgtagatac 120
 acgtcaaata acaaggagct gatccaccat cttttcaaac acgtcgaggc taaccccagc 180
 gatccccctc ggcgccacac tctcggaaga gaaagactca ataattgtgt gatatatgga 240
 atgccaacgc tgatggccac ttggttgtat ttggactggg agggttggaa aaatatgttc 300
 gctttcatac ttggaattgg gcactagttt tctagctcaa tctcttgagt ctagatgatg 360
 ctttcgacgg gacgggagta aagttacgtg gccaaacttct tgttttcaaa aggtttccaa 420
 ataaaagttc aat 433

<210> 10364
 <211> 433
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-C12

<400> 10364

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atcacatggg agggcgatcg aaggagctg ctcgctcatg gaatctgggc tggcctagat 180
gtgacgacca gttggctctt gcggctcggt ggcaggagtc ctagggcctt ctctgtgct 240
tttgaattgc tgtttatttg aatagacaac tgcataaat tagaatgaca aggtgctaag 300
agaagatcat gatacatata tggatatccc tgcattctat gaattatgaa ctgtttgatc 360
aaattgtttt gcactttttt acaggtataa acataactca ggtttgaact tagttcaaac 420
ttgattcatt ttt 433

<210> 10365

<211> 409

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-C3

<400> 10365

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gtttttgctc ctcgcccgcc tctacttaat gcaagcccga ggaggaagag aggacgtatc 120
agagaaatct gagaaacgcc aagggtctgc ctttctctta ctgtgatagt ataatataga 180
tgaatgtgta gtgttctggt ttactatat atgcagtga cgcgtgtatg gttatgtatg 240
tgtagagaag gtgttgaaag ttgctgctgc tgtgctgtgc tgtgctgtgt tagtatgtac 300
ttgctgtggt agtatgtact taggtcgtca cccctgggct ggcacgcagc tcctcgtttg 360
tgttttgtct actatgttgt ggaggcctcg tccttccatc acgttcgtg 409

<210> 10366

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-C4

<400> 10366

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 atctcgggta ggggggtcccg aactgtgcgt ctaggatcga tggtaacagg agacggggga 120
 cacgatgttt acccaggttc ggtccctctc tatggaggta ataccctact tcctgcttga 180
 ttgatcttga tgaatatgag tattacaaga gttgatctac cacgagattg taatggctaa 240
 accctagaag tcttgtctgt atgactatgg taatgaatat ctgccttccg gactaacccc 300
 tccggtttat ataggcaccg ggggaatcta gggtttaca agagccggtt acataagaag 360
 gaatcttcac agttgatcgc caagcttgcc ttccacgcca aggggagtc aatcc 415

<210> 10367
 <211> 448
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-C5

<400> 10367

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 catggttatg aaactgaaac tgttgtggca catcttacta agttgaatga tatagccacc 120
 ctttttacgc atgatgagaa aaatcgatac tactttattc tcaaaatatt tcctttctga 180
 ttaaaggatg atgctaaagc ttggtacaat actcttactc ctggttgtgt gcgtagtccc 240
 catgatatga tttattactt ctctggaaaa tattttcctg ctcataagaa acaagctacc 300
 ttacactaac tatttaactt tgtgcaaact aaagaagaga ttctcccaca agtttggggc 360
 aggatttgcc agctacttaa tgctttgcct catcatcctc ttaagaaaaa tgaaacactt 420
 gatatcttct ataatggact agctgatg 448

<210> 10368
 <211> 423
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-C6

<400> 10368

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 ctccaatctt tcctgatct ggaggatctc cgtcgccttg ttccatttgt tcgtcgtgt 120

cgtggagatg gggacagaaa gtggaagagg tggagcgcaa gtttgtttcg attagggtttg 180
 tgcataattct catcgggtgct tggagtggag ctacgggggcc caatggagct gccgggtctcc 240
 gacgcctccc cgggtgacctt tctggccgaa gggcggggctt gtgaagccaa gctggcttcg 300
 tttcttcctc cgggcttgat gccaatlgag aggcaactgt gcaaattcaa aatggagtcc 360
 ctttcttcca tctttgtccg gagatagagt attggcggtc cggtgatctc aaatggtcac 420
 gtc 423

<210> 10369
 <211> 417
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-C7

<400> 10369

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 atcgccctcc cggagaccga tacagagatc aatgatctga gcggcaagggt ggtgaaagat 120
 gccgcacga cgccgaagtt cacacagcgg gagatctcgt tcctgctgag gctgatgcc 180
 gagcttgtgc aatagcacag attgcacacc attaaactcat ggctttggat gtaaccgatt 240
 gattggcatg caggacagga ggagcccctt gtggaggaaa gcacaggttt acatactggg 300
 ttggtgtgat gtccttcggt gagccctggt actgggagag ttggggattg atatgatatg 360
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<210> 10370
 <211> 401
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-008-Q1-E1-D11

<400> 10370

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 aactaaaacc aggccctcag tttccccgag gtggcactgc aaggggctct agttcggacc 120
 aacacttaga gtagcactgg cgcgcggggg ggggggggta aaataaagat gaccctcggg 180

ttaattactc ccatgggaaa agtaatgggt tgtaggcaa atgtagaaca aaggttgggc 240
 cttgctggag gagtttcttt caacgcgaat tgtcaagggg ttcccatata ccaaaccgcg 300
 ttagggacgc aaaatccggg aacataatac cgatatgacg gaaactaggg cggcaagagt 360
 ggaacaaaac accaggcata aggccgagcc ttccaccctt t 401

<210> 10371

<211> 365

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-D12

<400> 10371

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 gcctatcagc tcttattgtg gttcataagt gatgaagcaa cacgaatcat ctgggtgctcc 120
 tcctttgcta gtcaaggatg agttggctgt atcaaatttg gatatacaag caagtttctt 180
 agataagacc gatgatgggt gtctttccca aaacaatgga atgcacaaat ctgagttacg 240
 cctttggatc gagagcggac atagcatgaa atgtgaaagc gtatcatcct caaacatcac 300
 aggtcatgat acaccaagca aggcaaatcg aaagagatca cgaccagaag agagttcgaa 360
 gcccc 365

<210> 10372

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-D2

<400> 10372

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 aaccctaccc ttctgagcc accatgtccg cctcatcgtc ctctctctc ccagttccgc 120
 cgatttccct cttgatctca ttcgggtgtcc cttctgtggc gtggatctgg aaaccaatgt 180
 ggcaaggacc gggagcaggg cgggccagag gttctacaag tgtgtccgct atgatgtaag 240
 ttctctgtt ttctacaaa tctcgattag ttctttccc gttcttggtt cagttctcac 300
 acctgcatct cgcagtgttc ttgctaattt tctcgcaggc tcgcgagtgt aggttcttgc 360

agttccagaa ggcatacgtc aggaggatga ccacctacca gatcgcccgt gctcaacagc 420
aggcgggggt gctccacctc cagatgcacg ca 452

<210> 10373
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-D4

<400> 10373

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actaacacta atattcttga ataattattt agtaacacta atattcttga ataattattt 120
agtaacacta atacttcttg aataagtagt ttgaccatag tttgagcaga ttttaacaaaa 180
agtaaaaaaa aataaaaaaa actaaaattt aagcataact ttttttcttt ttaaaatttg 240
aggattttta aaatttgcaa acaaggaatg tcatgggaat ggagatctgc cgtgccggca 300
ttagactaga cgattagtgt atgtatgttc aaaattttac ctccagagtc ggacgagctt 360
cgcttttagt tgaagtatgt cggaaatata atgaatttcg tcctgtttat atgaaatccg 420
ttgtgtttgc attaatccg t 441

<210> 10374
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-D6

<400> 10374

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gggtttttgt acattatc cgtcatggg taccctgtc tgcttgcct tgggaaggat 120
atacccctaa aatatgtgtt taaacacatt ttccctttca ttgttctgtt taatctgata 180
atcacttttt ctttccctt gacttgttta acctttctca tgggttatat gatctaagca 240
gtaataattc ggtgcttatg taaacaccct ggtgtacaac cttgtcagta agaccgtgtt 300
actattgttg atgacatttc ggtaaccacc gatggacgag aactttgcct attggtccac 360
ctcgtttcaa cgagcaggaa aatggttccc ttcgtcactc gcccttg 407

<210> 10375
 <211> 394
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-D7

<400> 10375

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gggccgtcaa aatggtgaat gttccgaaga ccaagaagac ctactgcaaa aacaaggagt   60
gcaagaagca cacacttcat aaggctactc agtacaagaa gggtaaggac agtctgtctg   120
cccagggaaa gcgctggttat gacaggaagc agtcgggata tgggtggtcag accaagcctg   180
ttttccacaa gaaggcaaaa accacaaaga agattgtgct gaagctgcaa tgccagagct   240
gcaagcacta ctcccagcgt gccatcaaga ggtgcaagca ttttgagatc ggtggagaca   300
agaagggcaa ggggacatct cttttctaga ctgctttcac ctatctggag tgggtggtggt   360
caagaagtat tactacttgt gttaagagtt tggt                                   394

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<210> 10376
 <211> 406
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-D9

<400> 10376

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tgaatggggt caaaactttc aagaatcaaa tgatatctct acaatagcag ataggagaat   180
gaccagtggc ttatccccac aaggcatgaa ggaattgttg cgcttggcat tgcggtgcgt   240
gaacccgaca agcgagaatc gtccgtcgat gagcctggtg gaagctgaga tacaccggat   300
acgcaagcag gagatcagga ggacgacagg catgccactg ggcgacacaa ctgtgaccct   360
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<210> 10377
 <211> 360
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-E10

<400> 10377

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tcttcagaaa ctcatcttgg catagattta tcaatcataa cgttggaaca ggggagaaca 180
tcccggtgggt ccaacaacag attgatatac gtttcacacc tgttgacaac atgataaaaag 240
gctgtgcaga gaagtttgct atggcgagat gaagtccact ctggcagacg tattccttgc 300
accccgatt tttgctgcag tgaatcggtt tcagatcgaa atctcaaact atcctatgct 360

<210> 10378

<211> 402

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-008-Q1-E1-E11

<400> 10378

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tagaatagcg tcactctgat gatcatatgc gcgaagcgat ttctctctcg cgactcggct 120
tctcgatgtg accacaacgg gctagtgaca ggggtgtctc cgacgaggac acacaagata 180
ccaagcattg atcacgggggt agcctggcat gtgagcgag aggagaccat ttcaaattgc 240
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aatactaaag taggatgtca ataaaagcac atcactaaat atataagata gaataatcag 360
ttgtaatttc taacatgtan ttttcaaaaa tacatgaatt tg 402

<210> 10379

<211> 457

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-E4

<400> 10379

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taatacagta gatgatgggt tgcttacaat gacaaacgcc taaatccgat gttatgagtt 120

gcttcgtttg gggctgattt g gatggacat gtttcatgcg aagggttaagt ttaccatcat 180
acttttggtg taattgcgga tgcttgcaat agagggttagc cataagtgcg atgcatgtcc 240
aattaacgac atcacgcagg caccggtcca cccacatgac catcattacc aatgtaacga 300
atgcgaatca catgaatgtg atgaaaacta gcatgacgat attctcatgt gtccacggga 360
gcacttttca ctatataaga gtttgtcgaa gcttgtcctt ttctacagaa tggattggga 420
cagcttgctg cactttaatt acttttgta catgttc 457

<210> 10380

<211> 256

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-E8

<400> 10380

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attctgggag cagcacgaag acggtaactt ccacgtgccg gactttcggg gttaagtcct 120
ccccacaact gggccgttca cagtatgaat tcagaatgtt ctactgggtcc tcgtttaaca 180
ttccgctcgtc ttctgcattg acacacattg tacgcctcat cctcctaacc cctaaacatt 240
ccatgggtcac atattt 256

<210> 10381

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-E9

<400> 10381

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agcgtatcat ggaaagtgtg ttccaacaca tgttaccaga ttgttctctg agattatatg 120
ggtcacctctg gatcaaattg gggttcaacg tttcggatac atacattgac attcaatttc 180
caaccattat gtctcaccca gatgttctct tacttgtcca agaattgtta aacaacaatg 240
actcatttat tgatgttgat gcaaatttcc atgctcgggt gccaatgggtg gtgtgcagag 300
aaaagcagaa tgggtcttctt tgtaaaatga ttgcacgaaa tgaaaatgca tgtctgacaa 360

caaatcattt aactgccctt ggaaaactac aatcaaactt gg

402

<210> 10382

<211> 301

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-F10

<400> 10382

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aagaaggaga tgtcactcat atacatccga atcggaacct ttacacatcc tgttttaggat 120

tttgctttgt tgccattagc cgctacaacg acgtgtctaa atcctgatcg gaaagtcaat 180

tcttttaaata tttctagtga aggcaagaag ttgtcacgcc gcagcggtaa cagcaacatc 240

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a 301

<210> 10383

<211> 467

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-008-Q1-E1-F3

<400> 10383

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attccaatca cttctctttt tgaaaaagtt tttaggcata agaagcaagt attttttttg 120

gtattttcat tttgtaaatt ttttgtttgt ttcaccacaa actaaacaaa aatagaaggg 180

aagacaaaaa ctacttagtg aagaaagcaa acaagcatac acgaaaatat caacctcacg 240

ctattgctcc ccggcaccgg tgtcagaaaa gagcttgata atcccgaagt gcaaggaatc 300

atcatagcaa tttccaaagg tggaagtgat aagtatggag tgtcgaaccc acaaagagct 360

aaaggtgaaga tcaatattct cccaagtcct atctgccacc gatacaactg tacgtacacc 420

gaacgtttgc tttcatctag aaacgagaaa tacaactaca ttgtggg 467

<210> 10384

<211> 474
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-008-Q1-E1-F4

<400> 10384

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 atgtcttcac aagatgtacc actatcttct tcaactctca aaattgtgag ttttcaacac 180
 tacaacaatt caatacccca aagaaagtta tgggaaaaaa atatagaaag tctagagagg 240
 ttggggacaa aaggatttct gtaactcagg ttctcacatc aatcgagaat aaagcccaga 300
 agttcaattt gaaaaagcgc agcagtttga tatctatttg aaaaatcata tttttctagt 360
 tactaaagaa taaaatcaat aagttcaatt tcaaataaca aagaagttcg atgtttctaa 420
 aaaacctact atttttcaaa tttataaaaa tacacaatga agttcaaata aaaa 474

<210> 10385
 <211> 453
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-F5

<400> 10385

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 agaaggacga cggcaagaag gagccgaccc ctgtgtaccc gccgtggtac ccgccgccgc 180
 cgccgtacca ctaccactcg caccctact accacggcca cagcgcgcgag gaggatccca 240
 gctcctgcgt catctgctga ccgagtgcac gttcagtagc tcgccgtcct gcctgccgat 300
 cgatcggctt acctgcaccg gtgatggacg gcgttcgtta tatacatgac atgaccgtgt 360
 aggcgtgtac gttgcgccgc tgatccggca gctgtgcac tggttatgct tagtttgtaa 420
 cgtgtacata cagaattaca gtatattgtt cac 453

<210> 10386
 <211> 459

<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-F6

<400> 10386

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agtttttcgt agtttagatc gagtctgttc ttcataccta taatccacga aaaagccaaa 180
aaaattaggg ttagttcatc ccatccgaac caatctgagc cttgcataat cttttctgta 240
tttgctttgt tgaatttgcg gttgcatcgt cgtgtccagt tgctgggtctt agcgtctagt 300
cttttagagt ttcgagttct gttcacaggt tgtcacgtcg ccgctggcat atatcaccac 360
cgcatcatca tcgtcgtgtg tgccatatac caccaccaca tattcaccgc caatccgaat 420
ccatatatgc caccatatat ccgccgccat caggccaat 459

<210> 10387
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-F7

<400> 10387

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ggactgcgga ggtgtttgac atggagctcc tgaggaacca gagtccgaa gaacagatga 120
ttcagcttct acaactcgct atagactgcg ttgccaggt ccagacgcc cgtccgacga 180
tgtcccatgt cgttgtgcgg atcgaggaga tcaagatgtc aggtggaagc accgaagaaa 240
ctaatacaaca acagagcacc ctgatctcta atggcatgag agaaaggagc cggctgcctg 300
ttgctgtagc ccattcatt ccgttcatag acttgacgaa tgctatcttc ttcgacggcg 360
gagccggctg ttttttcacc tcttcctttt aacgaacatc ggattcgttg tcgtcgtcgt 420
cttggtgttg ttgactg 437

<210> 10388
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-G1

<400> 10388

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tccagctaga agaagatgca agaggagtat gcctgctccc ctcgaggaga ttcccaagct 120
caccgctgcc tgctgggaga agatgctccc cttgaggaga tagatatcca ggctcatcgc 180
actagacgga gccatgtttt ggccccaagt ttcctgaagt gtagtgctgc ttcagccgtg 240
tctttctgcc gtgtcgctcc tcaaagttag tggtaactta aaacgtgtta tatatgtaga 300
tgtttgattc ggaggacatc ggggtattct tctgttctac tatctgtttg atctgcaacc 360
ttctgcatat gacaaggatg tatgcagatc cactgctagc tgatgttaaa catgttctg 419

<210> 10389

<211> 355

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-G10

<400> 10389

cagacacgac taagctgcag accgacgccc tcaaggaggc catcaccag gtggtggcag 60
acgccaagga gaagaacagg aagttcaccg agactgttga gctccagatc ggctcaaga 120
actatgatcc gcaaaaggac aagcgtttca gcggctctgt caagctgccc catgtccctc 180
gccccaaagat gaggggtctgc atgctcgggtg acgcccagca tgtgggagag gctgaaaaga 240
ttggtcttga atccatggat gttgaagctc ttaagaagat gaacaagaac aagaagcatg 300
tcaagaggct tgccaagaac tatcatgctt tcttggcctc agaggctatc atcaa 355

<210> 10390

<211> 245

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-G11

<400> 10390

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cgatcaccg gcgctgtcaa cctgatccat gtcccacgca gcaggatcac ggtctgcatg 120

cacggtgacg cccagcatgt gagagaggct gaaaagacgg gtctatgatg ccatgcatgt 180
tgaagcgctt atgacgatga cgaactccga gaagcatgtc aagaggcttg ccaggacgta 240
ccatg 245

<210> 10391
<211> 449
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-008-Q1-E1-G2
<400> 10391

gggtgcgaat tcccgggacc accatggcgt cttcaaactc cgggggcatc cccatcaagg 60
ccgaacagga ttccgatggc tcggcccaga gcacagctga catgactgct tttgtgcaaa 120
atcttctagt tcagatgcaa accagggtcc aaaccatgtc agagaacatc atcacgaaga 180
tagatgaaat ggggtgcaaga attgatgaat tggagctgag catcaatgac ctcaaggctg 240
aaatgggcag cgatgggtatg acccctacta aagtgaagga cgaagaatca aagccagcag 300
acagctcttc ctgagtgaag cagaagtagc agaagcaagg cgtattagtc ttgggtccat 360
gtcgatatca tcagccattc atcactaact tactgcatgt tatgagatgt tatttgcact 420
gttatatgca tatgagatat acagtacct 449

<210> 10392
<211> 454
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-008-Q1-E1-G3
<400> 10392

gggaccacag ggactgctat aaagactggt cttgcgaccg gttccagagc aaatcatcga 60
tgggtgcttga gctttggcgc tcccggcgga cagccggctt gcagcgccgc cgcgccaccg 120
aatcctctgg ccgaagggcg gccaaacctc ttctctctag ccttgaagct atatgggagg 180
cagtgtact ctagatcgat gttcatggct tgctgcggtg aagaactcgt cggaccaagt 240
ggatgatgtc ccggagccgg cgagtttgga gtcgatcggg agtggcttgg acctgattgc 300
gttctcttc agatctttgg ggtcctttct gcatatttca gggactgctt tgtaattttc 360

agtttgttgt gtgtcctgtt gttctggctt gtactacggt attgtaatat caaataaagt 420
ctggggctct tttggaccct gcccttggtc aaaa 454

<210> 10393
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-G4

<400> 10393

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ggggttgac atgcaattgg gctgagcaaa ttgggtgtcg gtgttcgagg tgtattcggg 120
tgggtgcgta tgtcaaagat ggacatacac ctaggtcaaa cgggttgtgt gttagagttg 180
gacaaacaac tatatgcata taccgggtcg agcacgagtt gcgtgtcaaa agtggacatg 240
caactagatc ggacatgagt tgcgtgctaa tattgaacgc gcaactaagt aagggtccgg 300
ggaatttgat gatagacatg taactgacac caccacaaaa taaagaattt aaaaaatcat 360
gaatgttttg aacacagccc agcttcttca attctgcccc tacaaaa 407

<210> 10394
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-G5

<400> 10394

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tctcatcgaa agacgggaca cctttgcctc tatcaagtgg tatcagtttt cagggttgctt 120
ggtgagattt tacagttttt tgtagtttag atcgagtctg ttcttcatac ctacagtcca 180
cgaaaaagcc acaaaaaaaaa ttagggtttag ttcatcatat ccgaaccaat ctgagccttt 240
gcatagtctt tttagggttt tgctttgttg aatttgcggt tgcacgtcg tgtctagttg 300
ctggtcttag agtctagtct tttagagttt cgagttctgg tcataagttg tcaogccgcc 360
gccgcacat catcatcgcc cctgccatct accaccaccg ctccaaatcc gtatccatat 420
accaccacca atctgtgtcc atataccacc accaatctgt gtccatatac ca 472

<210> 10395
 <211> 346
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-G9

<400> 10395

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 attctggaac acgaagataa tgatagggtc ctctgtgcctt acgttcccca ctaagtccctc 120
 cactcaatcg gggcgtagca tatgaactcg tacatttcga tcaattttct tttaaaattc 180
 agtgtcttca gcagtgacat aagttgcatg cgcaacatca taagcgtcat atatttcatg 240
 gtcacgtatt tcgacacgga gcatcagtcg atcgtagact acacatttgt caacaatggt 300
 catgatgatg ttctccccgg atacgctaaa tgtagatgga ccttca 346

<210> 10396
 <211> 355
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-H10

<400> 10396

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 cccactcca acctgatttt tcggggggtg tgtcgtcacg ctcacctatt ggtcaaccat 120
 aaccatccca ccctgcataa atgctgttaa atggttgtgc gtagtatata gttgcgccac 180
 caaaactctc agtcaagtt ctctgtctaag ccgatgtct tctctgactt cctctgtctc 240
 tctggcgcac atgtcgtcgt cctcgtcgcc aacgactcgc atttcccttg tgccggtgtg 300
 gaaagaactc tggtcctgtc gtcgtcggtc tactggcct tggctctatcc ccttc 355

<210> 10397
 <211> 432
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-H11

<400> 10397

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 aaaagatcca aatcgtagac gaaacaagca acgacttaaa ctaacaagag tcaaaaccta 120
 acaacattat taacatgtga attagatctt aacagaaagt acaagtgatc cgctacgatt 180
 cgcaaagaga ttcaactcaa acggagcaag aaactcaaaa tacgaacgaa ataagatcgt 240
 ttactaattt ggactgatgt caaatcttac attaccaaaa tcatgttcat gttgattaaa 300
 tgaaaagagg gcttcaagac gaaaattttg gcgttggttt caactaattt ggataaacga 360
 gtaaaaagtt atactagttt gaaaatcagg ggctgaatcg cgataaaaat aatcgagat 420
 aagtccctaa cg 432

<210> 10398
 <211> 247
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-008-Q1-E1-H12
 <400> 10398

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 ggacagagag aatgtcccc ctctggctc tggggatcct ggtggctggg ctctgcgcca 120
 ggggtccactg tctcccagag aatgtgtctc gagaagaaca gcacagagtg acatctgtgg 180
 atgggcactc attaccctcc accaactg acttctcctt cagcctctag aagcaatttg 240
 cttttttt 247

<210> 10399
 <211> 397
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-008-Q1-E1-H2
 <400> 10399

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 gcacctgtct catttgccg aactagcctg gtccaacaca aacggtgagg atggatgacc 120
 cgagatcatg cggcacgtgc cgcgctgag acggtgcatg taggggcgat gaaaagcacc 180
 acataaagct gtgccgagcg cgcccgggc ccatgtatca tggagcttga ggaaaatcgg 240

tcgggtgtga ggcagcctca atgattggac gacatggagc gtgcccggga ggcatcggcg 300
ggaggcgcggt gtgaaacgga caacatggat tcactctcac gtctcacgtg gcgatgcccc 360
aaaaggtggg tacttcaaca tcctttacat aagtaac 397

<210> 10400
<211> 426
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-008-Q1-E1-H3
<400> 10400

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gcctctatca agtggtatca gatttccagg ttgctcgggtg agattttgta gttttttgta 120
gtttagatcg agtctgttct tcatacctac agtccacgaa aaagccacaa aaaaaattag 180
ggttagttca tcatatctga accaatctga gcctttgcat aatcttttta cggttttgct 240
ttgttgaatt tgcggttgca tcgtcgtgtc tagttgctgg tcttagagtc tagtctttta 300
gagtttcgag ttctgggtcat aagttgtcac gccgcgcgcg caccatcatc atcgcccctg 360
ccatctacca ccaccgctta accggcaccg ctccgaatcc gtatccatat accaacaacg 420
atccat 426

<210> 10401
<211> 403
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-008-Q1-E1-H4
<400> 10401

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gcttatattc tcgaccatgc agttggtgat cgtgaatcgg gccacggtgt tgggttttct 120
ggtgtgcctc ccacagcatt agtccgaagc ttacataggg gaaagagctt caagtttgga 180
tctctgcaga tgtttatgga gaacgatgga agttgcgagg atatgggtcc ccgtgctttt 240
ccagtgaagg aggtacacaa aatagcagtg ttagatatta ggtagcgaa tgctgatcgt 300
catgcaggga acattctagt gtccaaggaa gaaggtgccca cctgcaagct gattccaatt 360

gatcatggct actgcctgcc agagaagttt gaggattgca cct

403

<210> 10402
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-H5

<400> 10402

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taacgggtgg ctgcaccagt atttcgagtc agttgtttcc atgtacgagg acaggtttga 120
gttatatgtt ctatgcagaa gatcatgcaa gaacacagca gataatcggc ctgataaaac 180
taattggttg actaatgcat ttcgaaagcc ttcgacatct actcgcctgg attatgtttg 240
cataagccca ttttctcttc cagttagaag gacaaaggag ctaagagctc tgactgggtg 300
gaggtattac tacagccttt tcttgagtt gtcggatatt gcaatgcctt ttgcatgggc 360
agtcgtggct agagtcagcg ctgcggtgtc ctacttctgg gtgtccaatg ataggagaat 420
cttggggctc aatttttctg gtataaggca atcgtctgggc 460

<210> 10403
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-008-Q1-E1-H7

<400> 10403

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atgtgagctg tgcagaaaga agtcatgtcg ttttatactg aatagtacat atgcttgaga 120
tatgtgattt cgtcaggttt gcgtaggctg cataaaacag tagttcacga ggaaagggtg 180
taggcaagta agagaccatc gatatgtatg tgtggagttt ttttttacct aaagattaag 240
tttttcagaa tttcagattg aggcctccat ggaacttgcg ctctaataagg gattgcctat 300
gcatgttggt actttaattt tagacctttt ccctaacaag tccaaatgct gcaatcttt 359

<210> 10404
<211> 370

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-009-Q1-E1-B11

 <400> 10404

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 tttgcctcta tcaagtggta tcagattccc aggttgctca gtgagatttt acagtttttc 120
 gtagttttaga tcgagtctgt tcttcatacc tacagtccat gaaaaagcca caaaaaaat 180
 tagggtagt ttatcatatc cgaaccaatc tgagcctttg cataatcttt ttagggtttt 240
 gctttgttga atttgcggtt gcacgtcgt gtctagttgc tggctttaga gtctagtcct 300
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 ctggcatcta 370

<210> 10405
 <211> 386
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-009-Q1-E1-B9

 <400> 10405

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 tgtatcacgt tttaaaagtt tgtagagtt tcaaatttgt tcaagaaac atttttcatt 120
 ttttaaagaa gattaaaaaa ctggatctgc cgctattgaa agtacttta ttagcggttg 180
 taattgaaga caaacgtagt cgctacctgc aaggctgcaa cggctggcaa cgattctatc 240
 cagcgtatgg tcacgggttt gaatccatcc gtcgctgcaa tttttcgtga cattttctat 300
 tatgttcgct tgtcgcctgg taaagggccg gccggttgc gcgaatcctg cagcgaaagg 360
 tgttcatttt gacgctcacg agtgtc 386

<210> 10406
 <211> 409
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-009-Q1-E1-C2

 <400> 10406

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 ccttactttc ccgagtaagt cctccctca accggcccggt aacatatgaa ttcttacttt 180
 togatcgttt ttcttttaac attccgtggt ttctgcagt acacacgttg cacgctcatc 240
 ctctaagcc ccaaattatc catggccacg tatttcgacc cggaccgtca ctggaacgta 300
 gactacacaa atgtcaagaa ggttcttgat gatgttctcc ccggctacgc ccaatctgga 360
 ggcatcttca ccaggcctat tcgtaagtac ggcaagcacg tgttctccc 409

<210> 10407
 <211> 288
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-009-Q1-E1-C5
 <400> 10407

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 ggctcatggg agtcctaaag aaatatgttc gtaaccgtgc taggccagac ggaagcatct 120
 ccatgggcca tcaagcagag gatgtcatta ggttttgtgt tgacgtcagt cttgacctta 180
 agaagattgg tctccctcag tcgtggtatg aggggaaacg tactagaaaa agcacgctat 240
 gaggggactc aacaatatgt ggggacgtgc attcctgggc tcaagcac 288

<210> 10408
 <211> 222
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-009-Q1-E1-C6
 <400> 10408

ctctggggtc gacactacgc tctaaactga atcgtcctat gccagtcttc tccgcatagc 60
 cggccgctga gtccgacagc ttatacctcc ctgccctcca atcagtccat ggcgagcgtc 120
 cccgcaaggt gaggaaggag ggatcagaag ccataatctc tcacctcgag ccctgtaca 180
 tagcggattc aggaaagacc gaactgcccc ctgcatccaa tc 222

<210> 10409
 <211> 439
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-009-Q1-E1-C9

<400> 10409

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tcgtaaaciaa atagaagagt atttagatca ctggtgggag taattaataa ttcgctaagc 120
atcgacagca cagtgcacac ggaagaggag agtaataatc ttttttttg aaaaggatgt 180
tgaaaccccg ggctctgcat caatagatgt acaccgccat cattattaaa ttattcaaca 240
atggtctgag aagaacatac atcaaagac tgaaggcac cactcacgcc taaaactcg 300
ttaataagga tccatcgctc nccaccgttc agaatcggtc tcaccgtcta ttcgtccgca 360
aacataccac acaggggagg agccagaatt tgaacatgag tggggtgaaa agccaacttt 420
cacaaaagtc acgaaacat 439
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<210> 10410
 <211> 393
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-D4

<400> 10410

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ggggacaaac ttggtctctg tgtgcttacg atggagtcac gcatttgctt tgagaactgc 180
tagcgtgttt aacctgacag cgctgtgaat tgtaggcctt ttcagcatat ttcacagctt 240
gttgtcttat gaagtgtctg acggcagcag gctgggttat gcctcctcgg tcattaatag 300
catttgtaac ttgtagagt gcacattaat ctcattgatga catatacata atacttatgc 360
tgactgttat tgtaacgacc tttatgcctt tgc 393
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<210> 10411
 <211> 394
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-E12

<400> 10411

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ctcgcggggtc gacatcatcc acaattcaga atcgtatgag aaccaagccc aaaagcagag   60
gcgccgtaca taccgtgctc atggacgcat caatccttac atgtccaacc cctgccacat  120
tgagctgatac ttgtcagaga aggaagagcc agtgaagaag gaggctgaca acgtcgtcgc  180
accaaggaaa gctatctaag ctaacggagt ggctgcattc gtccaagaat cttagttgta  240
gttcttctca agtacctttg ttggcagtgt ttgttgcttc cttgatgttt ttgttaccaa  300
catggagtaa ggatttgta atgttgatgt tacccttggtg attgcgactg gtccctatat  360
gctagaacag gtgcgagtag ttgagcatta gccc                                394
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<210> 10412

<211> 371

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-F1

<400> 10412

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gggtcgacac gtggctgggc ccaacggcgg cccatatatg ttaataaggc cggcccaatc   60
aaaggcccggt agaacttaat cacgtactag tgggctagcc caataacggc ctgcttaata  120
aaagcccatt tacggccoga aaccagatct ggaccgttaa atgttcgccc aatatttggg  180
cccatttacg aaccgaaacc agatctagcc cgttaattgt tcgccaataa tttgggcca  240
tttgcgggcc gaagccaaat ctggcccggt aattgttcac tgaataatcc ggcccaacta  300
cagcccaacc ccgaccaatg tgaggaaagg atgatggaaa ctatgattcc ctcacaagtt  360
gggatgagac t                                                         371
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<210> 10413

<211> 158

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-F3

<400> 10413

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 gtgcacgact actactccca cgtcgttcca gccaccatca acttcagctc ccatggagac 120
 tgtcatctgg gcacgggaca tcgagcgcaa tcggatac 158

<210> 10414
 <211> 399
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-F6

<400> 10414

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 agagctttcc accagccaaa tatgcatata gtatagctgt tgcattccat tactctctat 120
 gtgttacctt gccagcatat tccatgtgct gaccggtttt caggctgcaa cgtaaatgtt 180
 gcagactttt cagacgatga ttaaggagtt tttaggtcgt gggtctatac tcagtgatgc 240
 cggttgagtt gatggactca cttatcttcc aagccttccg ctgttatcgt tattagatgg 300
 gcttaagcca tatttattgt aatcagttct ctcttgagac actccgatgg tataagtgtg 360
 tgattgctac tctgctataa atccttagag tactgtgtg 399

<210> 10415
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-G1

<400> 10415

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 cagtgtaagg acaagttcct agttcaaagt gttgcagctg agaatgggtgc agcaactcaa 120
 gatattagtg cagcaatgtt caacaaggag ccaggggaagg ttgttgatga atgcaagctg 180
 cgtgtaattt atgtgccaac atcttcacct agcctgttct ctgaagattc agaacaaggg 240
 agttctgctc gttcattgga aaacgggact cctaattcta cattgccaca atctgtattt 300
 agatcatctg ggtaagcatc aaaggagaag tcctgggagg caacatccat gatttccaag 360
 ctagctgagg agaaaatgtc tgctgttcag cagaaccaga agttgagaca agagctgggt 420

gtcctacgca aagagag

437

<210> 10416
<211> 395
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-G2

<400> 10416

gggtcgacac gagacattct gcaatgcctg tgaagatgac cgagtgttag aatgcgagat 60
tcactaaacc atgtacaagg taatgatttg ggtgcgggat ggattgatca ccataccgac 120
ttactcttat tatttgcctt gctatatggg atggtaaata tgagtgcacat acctatagta 180
gagcgccgac gatcaaaacc ttgtttaagc cttagaatgg tataggaatt tttcccttgt 240
acaaggcagc ttttgccaac cataggttat acggtgagga tcagcccaga cccatttcct 300
ggaggagaag ccataaatgg ttgaccacca tgagatatca agagttgttt agtactgacg 360
ccagaccgt caactaggaa gaccagtcct cggaa 395

<210> 10417
<211> 410
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-G3

<400> 10417

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tgggaggcca ccgaggctgg cacaaccac cagggcgcgc ttggggcccc aggcgcaccc 120
aggtggggtg tgcccccttg gggcaccct ttggtacttc cttggcccaa cttgtgtctt 180
ctggtccaga aaaaatcacc aaaaagtttc actgtgtttg gactccgttt ggtattgatt 240
gtctgcgaag taaaagacta gcagaggaat agcaactgac actgggcact atgtcaatag 300
gttagtcca aaaaatgata taaagttgct ataaaatgat tggtaaacad ccaagaatga 360
caatataaca acatggaaca atcaggaatt atagatacga tggagacgta 410

<210> 10418
<211> 427
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-G4

<400> 10418

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gggtcgacca tgctcttcaa gctgaagctc gagctcttct ccaagcgggtg caaatcacct   60
catcaatggg gtgtaatcag gtgattctag aaatagattc gactgtactg aagaatgcta  120
tcacatcaag cgagtatgat ctagcgccgc taggtattct atctagagaa ataaaagcca  180
tgttatgtgt tactccctcc gtttctaaat atttatcttt ctagacattt caaatgacta  240
acacatacgg atgtatgtag acatatttta gagtgtagat tcactcattt tactccgtat  300
gtagtcactt attaaaattg ccagaataga caagtatttg agaacggaag gagtagtttt  360
aaaggcttta caagatcggg tgtaccaaga tcatgtaaag ttggtactca tgaactagct  420
gcgcgtg                                           427
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<210> 10419

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-G5

<400> 10419

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aagggtggatg tgctacaggc tgcgcttggt gctccatgc atcgtgccac gccgtgccta  120
gtttatgtgc aatatcgctg ggtggcggga aacaggtgag gaaatggcag gaaatagtgg  180
cgtgttcaat taatggcagg aaacaacatc aattaatgga aacatagcat atataaggaa  240
tatcgagcta gcacaagaag tagatgatga tgagatgaac acataccaca ctaaggaacc  300
catcggtgaa gaattcatca atcccaaag gttgtacact agcaagcatt tgcccacaac  360
acacacgggt tatcccatca cagacaggtc agatggatta actgtatgcc atgtatacac  420
attgttcaaa agtaatgca                                           439
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<210> 10420

<211> 422

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-H2

<400> 10420

cgggtcgacc aaggaaagg tccgcaaccg gtcgtctgtc aagttcggtg taacatggaa 60
acttgtgtgg ggccaaagaa ggttttggct ccagcgtgtc tggccatctg ccatggtaca 120
tgatataact gaagttacat cgggtccactg actggacata aaaaagctcg caatggatgt 180
caatcgaggt ccaagtcgtg gtggctcatg tttagagtgt gcgaagagag cccagtcaaa 240
cacctctgca actgcgtggc tatgttccaa cattttgtgt catgcgccat cgccatcgcc 300
atcgccatcc agttgtaaca aactctgtgt ctataataat aatagactgc tttgggacat 360
aataggcgag agctaattca gtagggagag gctaggggtg acgtctttcg tcctttcctt 420
ct 422

<210> 10421

<211> 142

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-H5

<400> 10421

ggtcgacaca actcccgaag atgcttcac taatggcaag gatgggtgcg gccaacgccg 60
ttcgaacgcc ggaagttgca accctatacg ctggagctac aaccggcgac tgggggagct 120
gccggagggg tcggggtttt tt 142

<210> 10422

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-H8

<400> 10422

ttcgcgggtc gacataaaat aataaccttc gccagacggg cacaaccac ccagttgata 60
ccctgctcct ctgaacaaca aaaaaacat cgctcaagaa aaactgtgct cacacctcag 120
aaacaaaaat actgctagat ctgctgggtc ccagttgtcg gccgctcctt gtgcaattct 180
ctcgtttatt gactatatag gttgacgatg gtgtgggacc gtgatgtcag gaaaccagga 240

tgaagcaaaa aaattatagt tgtatataat aaggacgaac ttgcgtacat acggctatgg 300
ccctgggtggg tccctactgt catccttgcc aagtgatctc ctgattcctc atgttcgttg 360
accatgttta aaatgctcgg tgccacggtg agcgcaacaa ctcgaaggac gacgg 415

<210> 10423
<211> 273
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-A3

<400> 10423

tcgacacatc ccactagagt gcgtcgtatt acgggtccct cacaatcatg aagactatga 60
ccgactttat tacctatata tagctctgga aggagcacac ccactccgat agtcgtgtta 120
gcggccctga tctcggggga atgtatcagc agatgcatgc attttcacgc catcatgagg 180
atgcgacagg agcaaccgat attgattaca ccacaccag tagatccagt gaacacttag 240
ctgcagatga ttccaatctt gatctacaga act 273

<210> 10424
<211> 338
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-B12

<400> 10424

gtcgacttcc atcaaagcga tattcatcat atcatcgaaa gacgggacac ctttgctct 60
atcaagtggg atcagatttc cagggtgctc ggtgagattt tacagttttt cgtagtttag 120
atcgagtctg ttcggtcata cctacagtcc acgaagaaag ccacaaagaa aattaggggt 180
agttcatcat atccgaacca atctgagcct ttgcataatc tttttaggat ttttgctttg 240
ttgaatttgc ggttgcacg tcgtgtcaag ttgctggtct tagagtctgg tcataagttg 300
tcacgccgcc gccgcacat cgtcatcgct ttgccatc 338

<210> 10425
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-B2

<400> 10425

tacgcgtcga aattccaggt cgaccgctgc gagaaagacg acataatggg agaacgcaag 60
agaacatgtc tagaaaggct gctggcgagg agccgttgcc agaagaagat ccatccaacc 120
ctatcttcaa gccgcttcct gagccatccc gcttagaggg ttatctcgta accaatcaga 180
tctcgagcta ctgcaaccat atcaatgggg ttgctggcca cagtttcaac aggctatact 240
tgatgaaggc gttgcaggaa gattaggtgc cgggtggcag ctgctgtgag attttaactt 300
gacactgtac cgcacctcaa ttttgcaatg tactccatgt gcacacgcac attgcctatt 360
ttgttttgct caaaaaaaaaac cgaaaaa 386

<210> 10426

<211> 422

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-B3

<400> 10426

gcgtgcggac cctacgggtt cgagaactat gtagacatga ccgagacatg tcttatgtca 60
gtaaccaata gcggaacctg gatgctcata ttggttccta catattctac gaagatcttt 120
atcgggtcaaa ctgcataaca acatacggtg ctccctttgt catcggtatg ttacttgccc 180
gagattcgat cgccggtatc tcaataccta gctcaatctc attaccgaca agtctcttta 240
ctcattccgt aatgcatcat cccgtgacta actcattagt cacattgott gcaacgctta 300
tattgatgtg cattactgag acggcccaga gatactctc cgacaatcgg agtgacagat 360
cctattcgcg atatatgcca actcaacgaa caccattggg gacacctgtt gagcaccttt 420
at 422

<210> 10427

<211> 298

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-C12

<400> 10427

gtcgacggga ctgtctcctc taactgatag cacatcgccg gaaattttga aataaatcca 60
gaaataatgc aagcaccagg acttgaacac tgggtgggctg gggataccac tgtccctcta 120
accatccaac cacagggttag tttgcattag aaaaagggtt ttgacatata cagaaaatgt 180
agaatgaaaa caaagtagaa ccaagaacat caaaaaatgg gaacacaaca agagacaaga 240
caaacctaac gacaatgaat acaaacaaat gtggaaagaa gaaaaatgga gtgaaaac 298

<210> 10428

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-C3

<400> 10428

tcgacgtcga ccactacaat gtctaccatc tacatcgatc gacgggacac cttggcctct 60
atcaagtggg atcagatttc cagggttctc ggtgagattt tacagttttt catagccata 120
tactaccacc gggaggacca ccgctgccat ataccagcac cacatatcca ccatcaggct 180
gagttctttg cttattaggt ttgttttcgg gatccatcta aattccgagt cgtgtttcca 240
tgtcggagtc aggtagccac gtcctgttta tgcccaagat ttttcgaaaa cgcatttttc 300
gaacaaattt ctggetatcc tatttttacg tgtgtctgag tgttttgaga cacgtgccac 360
tatatgaagt tttttgtgac ccatttccag ttttt 395

<210> 10429

<211> 381

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-C4

<400> 10429

tgcacccgct tctcgagatc gagtcttagt accactatct gatggatcgt gtgctttgtg 60
ttaggccatt ttttttagaa tcgcgttgga ccacttaact ttgccacaag gatattttgt 120
ttgtaaagat gagtatatca agccattgca tgctatttac atatctagca tctaaatcag 180
gttatcgaca tagttgcatc aatcagacta gcaaatcgtc actctggatg acatcaacat 240
cttatcacag gatttaagcc ccatatggat gccggtatag ccacatgcat tgtcaagact 300

ctgtgtaagg gtgcaaacca aaggatagct aaccgtccat tatccaaagt cctagtatct 360
gtcactagct ctaataacat t 381

<210> 10430
<211> 333
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-C6

<400> 10430

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acttgagagt gccaggaagg agatcgccct gtggttccct gagggcattg cacagtggag 120
gagcagccag cacaactgga tctgtgaggc ggaagatgtg tcatgagtgg tttgagtgca 180
cgtttcatta agcatctacc agactagtct ttggttgttt acagttttga gatttgtatc 240
ttgggaacct tgtttgtgtg aactgaagtt atctccttgt gcttgagcat gcaagcgta 300
tctgctgctc tacatttgat atatggtatt gag 333

<210> 10431
<211> 356
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-D11

<400> 10431

ggaaatgcaa attcgaagag gcgaacagcg cctatgagga tctcaaccag ggcaagatcg 60
ttggccgagc tgtagttgaa atcatgtagt gctgactgct gacgagatga tcatgtgggt 120
gaaaatctgg gtcaaacaga taagaatatg ccgcggcaac tccgcgaact cggtttgtgt 180
tgcagcacgg tctcgctccc tgatttgtgt tggatgcaaa aaaatttgtt gattgaaaga 240
ttattgtgct cacaaggaga tgtctgtctc agtgtgttct tctttccatg atacatattg 300
tgaatattgg gtatacaatt tgcttatata gttctgcagc cagatttctg ggttct 356

<210> 10432
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-D5

<400> 10432

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ctgggtccatg ttgtggccga gtaaactctt tgtccctcac ttgtgttgtc aagtgggtgcg 120
gcaggtcggtt gttgggtggac tacataaaag gaaatagtga catacatggtt tctcgtgttc 180
aagcagtttc ttgcaataat tgttatccgt gatataaggc atgcaactga catttggttaa 240
atcatggtgg cgtagaaaa ctatttctac gtcttttcca cttctcagtg acggctatag 300
gacgaagacc tcatcccttc taggctcacc tgtgcttttt tttttggcga ggtaggcccc 360
cctgtgcttt gcactctgcgc tcaccacaac acagatacaa gtaacaggtg accaaatagc 420
aagcagaaaa atccacagtg atgccaggcg 450

<210> 10433

<211> 303

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-E1

<400> 10433

tgcacgaaag tccctataat gagtcttgat acctccgccg tectcgccgt cgcctccaac 60
atcgtcacaa ccatcatccg caaggctcat gcctatatca tggttcatct caacggttca 120
atgcccattgt cattggtagg tactcacgag cctgcaacct aatgcgaact ggattccatc 180
agatggccta acgcttattt ttacaagatg ctgaacgcca gcattgcttc catcctgtag 240
tccaaactgt ccatcccaa gtcccgttc tacctcaagt tccaccattc aaatcgctca 300
tac 303

<210> 10434

<211> 310

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-E2

<400> 10434

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agtgctcata tctgccaaat ggcgatcgac attaccatgc gtacttgctg acgaaacctt 120
 agccagcgtg agcacgggct cacaactccc tcgtcaatcc tgatctaagg aaccacacct 180
 caggcgcaac atggggccatg cccttaacgt tcactctact ccttcattac tatgtgaacc 240
 cgaacattca gatgcagacg atagttacgg aattcacctc cacatgaatc tgccgcacgc 300
 gttgactcaa 310

<210> 10435
 <211> 122
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-010-Q1-E1-E3
 <400> 10435

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 tggaccatcg accttcacg ctgccccgtg gatccccctc gcgattgect gcaatcttct 120
 cc 122

<210> 10436
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-010-Q1-E1-E5
 <400> 10436

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 acggcgctgc cggccggcga tggatatgga gaggagctcg ggtcttcctt gtgtatatta 120
 gggcagcagt agttttagtt tgtcttggt tcatgccgtg gtctggcggt atgccgtggg 180
 gatgcaaacc actggagctc tcgagcggcg tctggtggtg gcctccgtcg ttttctttct 240
 tgccaccatg gtggtggaaa gtggaagacg ccggatctgg caagatcccc ttgaataagc 300
 tcgttctggt gttgtggtgt tccctgatct ggagggcatc caactgctac tgcttggttt 360
 ctcaggctac catggtggtg gatgagaagc aggatagttg cagaatcctg aagtttatag 420
 gtcgagttcg agcatatcag 440

<210> 10437

<211> 343
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-E8

<400> 10437

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cgagtttgat gacatggagg attatatcga cgacgcggac tgggacgccg acatgtatga 120
tgatgtgttc gatggctgaa ggagctgtga ctatgaccgg gtccggttct cacgtggaag 180
gaaggacggg aacttgggtgc tgagacaatg tggtcgttac ctgtgttttag attcttgaag 240
ctgggttctc gtacgtctgt taactagtct gctactctct tgctgtgaaa ctgggttcgc 300
tttctctccg cgactgtaat tttatgccgc acctgtgatt tgg 343

<210> 10438
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-F1

<400> 10438

cgacgcgttc tttttaattt tttatTTTTT ttttttgcgg aacaggcaac cggaagtggg 60
tcataaattc attcagcatc atccaggaca ttttcccaaa caaaaatgtc aagcttgtcc 120
ctatctgtct caggagaagg agttcctccg cagtaagtaa tcctgttatt gtcttcacaa 180
cacagtggcc acagctgcta ttccaatatt ccaactggca ctactctaac ggtcactagg 240
gagctaaact aaactaccag tacgtactag tttatcccc atggatcggt gggtcgacca 300
tactaatcac accaccagct cccatttcc tcaatcatca gggggaccaa aatgtcctgc 360
cgcattgaaa gttgagacag ctagccgtga ctagaactgc agattacac 409

<210> 10439
<211> 396
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-F11

<400> 10439

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gaacactgtc ggcacgcaca cggatccttc ccctgcttgg gaagaccatt tcagagctct 120
ctagctagta ggactgcacg aggaatttag tgaggatgac tggaagtgcc tctgataagt 180
tcaacagacc cccaaaaaac cttgaaacta actcagactt ctgcggtggg ggtagcgagc 240
tattgaactt cgtaaaccgc cctggtgatg cccttatcct tcccgttgt gatggtagct 300
ccacatcttg cccccctcat gcacctcata tccactgcc tgttgatcag aaaaataaaa 360
acaataatca caagacagaa aactggtctg aaaaat 396

<210> 10440
<211> 225
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-F2

<400> 10440

aggtcgacac agatcccaat ggttcacat atcatagcac cctcaciaat gggagcctat 60
acatactcca tccgtcaatc tccctggtga tgctccatct tggaacgaga ctcccaccac 120
cgctgcctca ggataggatt ccgtgaattt ctttgcacca tgggccacag gagcaggctc 180
aggtactccc ggcgcactct cttcgggagt atagtcacct tttcg 225

<210> 10441
<211> 257
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-F6

<400> 10441

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cagagataac acccctaatc gtgccgatcg tggtttatac gtggatggta ctagcttgct 120
cctagacttg ttttggggac gaatgaacac attccactgc aaacgatgag ccttcttctc 180
gcatgtgtgt ctgagtgtat gccaaaagtc ctaccgtact ctctccgtac ctgtacgcct 240
cccagggggt tttatac 257

<210> 10442

<211> 345
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-F9

<400> 10442

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ggagaaaggt tggaccccgga gcctatztat aaggaaaatg gataaggcag gcgcggggat 60
cgaggagcct gaagcggcga aagagggcgt agttgtcacc tcgatcttca ggataacatt 120
aatgaaggga atcttttttaa tcatttttaga tagagatgag ttcattgataa tccgttgctg 180
tgtccagagg atgacgtcac ggcagtttaa caaaatttac aggagaagac atcatggtgg 240
tttacgagaa atataacgag atgttcacat aatttcttta agtattgaag attgacatga 300
atacgttcaa atcaatttgg agcctaattg tggggatata actac 345
  
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<210> 10443
 <211> 434
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-010-Q1-E1-G3

<400> 10443

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gtccactaca tgacaattca ccattatttg ggcctagagg aaggcattgg gaagtaataa 60
gtagacgatg gggtgctaga gtgacagaag cttaaaccct agtttatgtg ttgcttcgta 120
aggggctgat ttggatccat atgtttcatg ctatggtttag gtttacctta atacttctgt 180
tgtaattgcg gatgcttgca ataggggtta atcataagtg ggatgcttgt ccaaggaatg 240
acagtacca agcaccgggc caccacata tcanattatc atagtactga acgcgaatca 300
tatgaacgtg atgaaaacta gcttgacgat aattcccatg tgcctcggg agcgctttcc 360
tttatataag agtttgtcca ggcttgctct ttgctaaaaa aagattgggc catcttgctt 420
caacttattt actt 434
  
```

<210> 10444
 <211> 422
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-010-Q1-E1-H11

<400> 10444

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ctttgcctct atcaagtggg atcagatttc caggttgctc ggtgagattt tagagttttt 120
cgtagtttag atcgagtcgt ttcgtcatac ctagagtcca cgaaaaagcc agaaaaaatt 180
agggtgagtt catcataacc gaagcaatct gagccttgca taaacatttc tgtaattgct 240
ttggtgaatt tgcggttgca tegtcatgtt cagttgctgg tcctagcgtc aaatccttta 300
cagtttcgag ttctgttcac aagttgtcac gccgtcgccg cagcatcatc atcgccctgg 360
catcgaccac caccgctccg aatccgtagc catatgccag catcagtccg tgtccagaaa 420
gc 422

<210> 10445

<211> 420

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-010-Q1-E1-H2

<400> 10445

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tccatcgctg gctactccat gggctactgt tcaaccagcc ctctccacgg gctagtattc 120
aaccaccctt ccacgggcta ctgttcatcc agccctccac cggctactgc tcaaccagcc 180
ctccacgggg ttgtcctgtt cattcagccc tccacggggg cttgttcac ccatccgaac 240
cggctcgatc ggggtcttgt tcatccagat gtaacaccac tatgtcctgt tcatccaacc 300
tcaccgggaa ctgttcatcc acccccagc aacgctcatt gttcatccat aggagcatc 360
gatcggcttt agttatcatc agtagcgaag gaatcgctcg atcactcggg ttcagtaacg 420

<210> 10446

<211> 446

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-010-Q1-E1-H4

<400> 10446

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gacttgggtca aaaggcagag gcctagccca tggaaagcct gttaatggcc tgttcgcata 120
tagcccatTTT acaaccgcgt aactcatagc ctattacgac ctatccgaat taggcccagt 180
agcgtcatct aggccgtcca atatgattcc agtccattgt aacttccggc ccatgtacgg 240
cccatgacgt cttttggccc atatgtggcc ctttataact cttggcccat taacagccgt 300
gggtgcaacta gcccgtaatg aacagtgtat cgctttatac ccattagtgg ccattattc 360
cattgggcca tttccagccc atgttatctt tcaaccttcg cagggcccat ttattcttgg 420
gttcatttca gcattcgggt tactac 446

<210> 10447
<211> 456
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-011-Q1-E1-C4
<400> 10447

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caaccaacag agtcaccgct catattacgt tgccatgcca taccagacat aaccgtccccg 120
acggagaccg gcgacaaact catgcctacc caaggcagag gttttcctgg gttcctgccg 180
gtatgcatgt aaggcacatg aggatgatta taatcacaag tatgatcatt tccaacagca 240
tggaatcac taacatgcac ccatgcatat gatcatatca catgaaataa caagattctc 300
caaagtgagg tgatgttata aatgtgtcat caaacacaca aaaatattat gccgggggttc 360
agaatggttg ctttcaggtc atggaaaggc anggtgcatt tcaaactctt gaaatacttc 420
tcctctcttc anaaaatcct atttttgaaa atataa 456

<210> 10448
<211> 127
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-011-Q1-E1-C7
<400> 10448

ctttcaacat tgcagcgttt taactctggg caagtcctg atgttgatcg ctaccaatgt 60

gtacaatcgt gagctggata tcgaaactgt tcactcttggt atcaactatc acatcccagg 120
gtttcca 127

<210> 10449
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-011-Q1-E1-E7

<400> 10449

ccgtcattaa caatccagta gtcgcgacaga gcgctcctgt cacaccacg atgcggggtat 60
atccccacg tgtcgatgca ccacttagat gcataaccgc attgggggtg ttacaacttg 120
gtaatcacag ccacccccga cttatgaccc ccccgcttga tcgaatcact gacgttggtg 180
agtccagaac caaatgcctt gagtcttaag attatacata tccgccagta cgactctttt 240
tactcctcat tcccttcgc gccctggcg acgcccc 278

<210> 10450
<211> 330
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-011-Q1-E1-F8

<400> 10450

ctctacgata gattgagcgg aaagaatagc ttcattgtat ttactacga actcttcaat 60
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gttctccgct attaattgtct ctggagtgac tctttgttgc atgttgaggg attgttatat 180
gatctatcta tgttattatt gttgagagaa cttgcactac tgaaagtatg aaccctaggc 240
cttgtttcct atcattgcaa taccgtttat gctcactttt atcgcttgct accttgctgc 300
ctttataatt tcagattaca aataccttta 330

<210> 10451
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-011-Q1-E1-G8

<400> 10451

attccccgggc catggattat acgcactctc acccttccat cattgctagc ctcttcggta 60
ccgtgcattg ccctttctca cctcgagagt tgggtgcaaac ttcgctgggtg catctaaacc 120
ccgtgatacg atacgctcta tcacacataa gcctccttat atcttcctca aaacagccac 180
catacctacc tatcatggca tttccgtagc cattccgaga tatattgcc a tgcgacttcc 240
atcatcatca tatacatgac ttgagcattt attgtcatat tgctttgcat gatcgcaata 300
tagctagcat gatgttttca cggttgtcc tttttttatg tcattgctat gctggatcat 360
cgcacatccc ggtacaccgt cggaggcatt catatagagt catatctttg ttctagtatc 420
gagttgtaat attgagtt 438

<210> 10452

<211> 409

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-011-Q1-E1-H8

<400> 10452

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taccacaatg ggggaggcgg cgtctctata taccgctat ctctcgcgag aggggagaga 120
gcgttttggg agccgcatgt ggacaagttt caccgcatg atgctcaccg cgatgagcac 180
agatctcttc tctgtgttgg tatattatat gatctatctc tacttgtgtt gtgtggacac 240
actcactaca ctcggtctcg agacatgtgt tataatgtgc tatctctgtg ctctctctta 300
aatctcagac tcttataatg agttgtgttc tcagactctt atgaggagtt gtattcacag 360
actaaactcc tatagtgttc tatgagtctc tggttgatgt gtgcggtct 409

<210> 10453

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-B6

<400> 10453

tgcaactaca tcaatcgatt ctcttcgtct ttgggtggtct gcaccttccg tgccgggtgt 60

ggaagacgga tgacgcagtg ctgttatggc gctgacaggc agctgttcta cttcggtctt 120
 ccgaggcaat ctttcatggc acatgcaatt gaaggatgg actacaagag tacagactgt 180
 tatatatctg gaaggcgaaa ttttggggct gtatctgatt attgaatgac agacagttat 240
 atacgagata agattcctag gtttgccatg acatataaga ttgtggcaag gccgtgctcg 300
 ttttagagga catgggatac atacaggaag cagctgaaat tgatggtggc aagtctggta 360
 tttagaagat atctcatgaa gtcattcatc aaacgtttgc gaacaaacca tttgtcatcc 420
 tggacatg 428

<210> 10454
 <211> 411
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-012-Q1-E1-C8
 <400> 10454

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 tgtccataac cagggacacg actaatcata attagtttat acactctgca gaggtttgcg 180
 ctcttttccc cacaagattc gatctcccc gttgaatttc tcgactgcc tgatgtttga 240
 gaaatggatg atcgagacac agtctttcta aagagggtccc cttaaccgat agataggccg 300
 gtacacctac aatcccctac atctgctagc ctatcatgga aaggtttccc acaacttact 360
 caactatgcc agagcccata atggcttgtg gctgcacacg gaagtttcta g 411

<210> 10455
 <211> 391
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-012-Q1-E1-D1
 <400> 10455

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 caagacttac atcagatcct acatacatgc atattatcaa gaagggttg tggagttgtt 120
 gcagcaagcc agctttgact cttggctagg ccaacctacg agactccaac ttgaaatggt 180

tttgcgtaca cgagtccact actcaccact tcaatacact accgaggatc cgcctccgtc 240
 ttcctacgga agagccatcc tcggcactca cacttatctt gaggctttta gtagtttcca 300
 tttacttgtc tatgaactgt ataggcaacc aagtagtcct ttaccgcgga cgcggctatt 360
 cgaatagatc atgataaacc tgcanggggc a 391

<210> 10456
 <211> 413
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-D6

<400> 10456

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 agaaaccctc ccatacagaa cttgttgctg tgcaagcaac agctggaaca attgctggag 180
 cttgctcatc gattatcact acaccaatag ataccatcaa gaccggtt caggtaatgg 240
 acaactatgg cagtggaagg ccatccgtca tgaagactac caggctgcta ctgcgagaag 300
 aaggctggag aggtttatac cgagggtttg gaccacgctt tcttaacatg tctctgtggg 360
 gtacatcaat gattgtcaca tacgagctaa taaaagact ttctgtgaaa cct 413

<210> 10457
 <211> 358
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-E3

<400> 10457

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 gccagccgca cttgcgcgtt ccaacttttg gcgatgcgct tggttatcta gtactagtag 120
 tatgtagtag tggcctgtga tggcctgttg gactcctggg atgttggtt octaagctgg 180
 ttgccgcact tgggtgcctca gaacctttac tatcgaacca tctaatttgc tgcaaaaaaa 240
 aaaaaaaaaa aggaaacgaa aaagatcggg aagaagaaca gaagagctaa aaagagggga 300
 agcgggagga gagagacggg caggggagga ggcgcagggg cggtaggggg gggatatgg 358

<210> 10458
 <211> 398
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-F7

<400> 10458

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 caacttttcta aaactaatgg cactaacaga aagtttataa ttttgctccg cgtccctggc 120
 ccatgaccat tagtcctggg ttgtgccaca aaccgggact aaagggttgg tccttggtgc 180
 gggcagagtt tagtcccacc tcgccaaccg aagggggctc acaccagttt ataagccctt 240
 ccctctctgc ctcattgagc tcctctcaaa gtgaaaatag atgccctaata agagaaaagt 300
 ttaacctaaa ttcatagtga atttctctga aattcataga aatttactag gaatttaggt 360
 tgaattttct ctataaacgc atccattcgc attttttt 398

<210> 10459
 <211> 429
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-012-Q1-E1-F8

<400> 10459

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 aggaatcctt ttgtatgaat tgctcgaaaa gtttttgtgg gcgatttgtg gtctaccttc 120
 agagactgct cgcagacgag agctcatgta tgaggcccggt gggcggtcaaa cagggagtct 180
 tagctggaaa cccggttggt gtttttttagg agctacatat ttttataacc tgtaaaaaat 240
 agaaaaatat atatttttta aaaaaaattg ttccttatgt gttatctcat aatatataaa 300
 cgttcggtgt atataaaaag ttcaatgtat aataaaaaag ttcggagtgt tataaaaaatg 360
 ttccatataa ttgagaaaag ttcaccttat attaaaaatg ctcaatgtac ataaaagcgt 420
 aaaatgttc 429

<210> 10460
 <211> 116

<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-A1

<400> 10460

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atcaagtgtc actatatattc cacgttgctc ggtcagatct tacacttttt cgtacc 116

<210> 10461
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-A10

<400> 10461

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tcgagccctc gctccaggcc ctgcccgcga agtacaacca ggagaagatg atctgccgca 120
agtgtacgc caggctgcat ccaagggctg tcaactgccg caagaagaag tgtggccaca 180
gcaaccagct gaggcccaag aagaagatca agaactagag ctgtaagac tgtcatcgcc 240
gctttcgttg tctgggtaaa tcagtagaca taaaatgttt tccggttatc gttttgctgc 300
ccctcatgtc aggatgttga accttggta actctagctg agtacttgcc tcgttttaat 360
gtcagaactg aagtgaacct tggcaaaaaa aaataagagc gg 402

<210> 10462
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-A11

<400> 10462

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atacaagaat gggcagaagc aacaaacaac cgtagccgtg caagtaaatg atgcaaatga 180
aagtaatgaa ttaacagaat ctaagcacia tgattatctg gttgcctccc gtattcaaat 240
tatctatcca catacaagac tatttattat aattgcaatg acaattacgc caaactatac 300

catttgtggt gtgttattca aaaaactgtg aaccggtcta ttggaactac attacttatg 360
 catggtgaat gtaaatacatg gcaccacaca tctatcatcc ta 402

<210> 10463
 <211> 364
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-013-Q1-E1-A12
 <400> 10463

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 tgatggagac aggatattca ctactcattt ttggagagat ttgttcaaac tgcgggacac 180
 taagttgtct atgagtactg cttatcatcc tcaaaccgat ggacggagtg agcgggtgaa 240
 ccggtgtttg gagatgttcc tcacgtgtgc agttcatgat acccctacta agtggcatgc 300
 gtggctgccc ttggcataat tctggtacaa tacacattat cactcatctc tggagtgtc 360
 tccc 364

<210> 10464
 <211> 442
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-013-Q1-E1-A2
 <400> 10464

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 tgaacaagaa caagaagctt gttaagaagc tagccaagaa gtaccatgct ttcttggcat 120
 cagaggccat aagcaagcag atccctcgtc tccttggccc tggctctaac aaggcgggca 180
 agtttccac tctggttagt caccaggaat ctcttgaagc caaggtcaac gagacaaaag 240
 ctacagtcaa gttccagcta aagaaggttc ttgcatggg tgttgctgtg ggcaacttgt 300
 cgatggacga gaagcagatc caacataaca tccaaatgag tgtaacttc cttgtgtccc 360
 tcctgaagaa gaaatggcag aatgtgaggt gcctgtacgt gaagagcanc atgggggaagc 420

gtgtacgggt gttctaagtg tg

442

<210> 10465
<211> 162
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-A5

<400> 10465

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ggtgcgggag cgctgccgga aagagtgggg gatctggggg ggcgacgac cccggacgccg 120
acaacgcgtg agaggacatg atgggcgtca ccgctcccaa cc 162

<210> 10466
<211> 292
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-A6

<400> 10466

gaccaaaggg atgactcaac ataaaagtaa agagataagc ccttcgcaga tggaatcagg 60
gatttgatg ggtgctcgac ctgcattata aaattgatat tgagtattat gtgggggggc 120
aaacttttat tgtcagtaca atgacgggta gatggccgta tcggctacaa ttttggcggt 180
attacatgtt tgcttgagct tggtaaggt tcattttctc caatcagcat caagcataaa 240
tccatggctt tccaaaaga tcgaggttta cttacacatg acagccccgt gg 292

<210> 10467
<211> 332
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-A9

<400> 10467

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gccaaagctg ttactcttgt tgctgaacct ttcacactac aaaatgggtg cctcaggctc 120
acgtccaagg tcaaaagacc gcgagctaac gcctacgtca cgaaagagct cgcacatatg 180

tatacataac tccgtgacac ccaatcagct acgcacacgt tgttcoctact ctacaaatgt 240
 tcacgactac gggtcacacc tctccaggac aggctcacac cactcagcac cgatctctca 300
 tctgccttct cctcttgact actcttcacc cc 332

<210> 10468
 <211> 66
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-B1

<400> 10468

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 atcggtt 66

<210> 10469
 <211> 316
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-B10

<400> 10469

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 ggttcttcgt caaatcctc ttcatcgta tcaacaatca tcatcgaccg gtccggatga 180
 tcacgtcttc gcagatttca ggacccttta tgaaaggaag gtgtacactc aatttagccg 240
 ttcaggttat cttaatctca gtccttaaag gaattcattt atgatttcaa tgtatacgac 300
 agttcccttg tgtttt 316

<210> 10470
 <211> 341
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-B11

<400> 10470

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tttgattga tatcaagaat ggaaagcaat ttgattaccc aagattactt ttcattatca 120
caggtaaagg gcctgataga aataaagggg atgagcaa ataaaagggtta aaactcagac 180
gtgttgccctt ccggactatg tggcttgcat cggaggacta tcctctattg ctaggatcag 240
ctgatctagg cgtttcgctg catacatcct cgtcggcgct tgatctacct atgaaggctg 300
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<210> 10471
<211> 452
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-013-Q1-E1-B2
<400> 10471

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ctgacacatt gggccaacac catgataatg gcaactctgc ctcgttaatg tcggccacca 180
acgatgataa ggccaaaccg ccccatatgg ccattgacct cacctccaac gggaggaata 240
gattaggttt tcagttgttt ttaggggttt ctttgttatg tataaattac ttcgaaatga 300
ttgaaaaatc ggtgtccacc ttatttgatc actctggttg gatgggctcc gccagctgg 360
ctatccacaa acatgtccga caattttttt gaaggcgctac ttatttgtat tcaagcaagc 420
ggcaaacc aa tacatgtaca attacaaata ca 452

<210> 10472
<211> 258
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-013-Q1-E1-B8
<400> 10472

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gtcgatgagg acgactagt atgagcgctt ttgtccacc cagtgtacta ttgcaccggg 120
cggttttgtt gacgtctggc accctgccca gcgggcctgt tcctttgagt tttggttatc 180
tctcttgagt tatacattgt gtcttctgga ttatgtgccg tgctggcatt tggatcttac 240

tcttaatcct tgtgcaaa

258

<210> 10473
<211> 157
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-B9

<400> 10473

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gcaaggctgc gcctccgcag cctcgactcc cagtgggtact tcttcagccg cctcgatcgc 120
aagcatgcca accgcgggct cagcaactgc tccactg 157

<210> 10474
<211> 270
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-C1

<400> 10474

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ctaagttgaa tgatatagcc acccttttta ctgatgatga gaaaacgggc gaggacttta 120
ttctcaaatt atttcctttc gcattacagg gtgatgctaa agcttgggac aatactcttg 180
ctcctgggtg tgtgcgtagt cccagagata tgatttacta cttctctgaa aaatattttc 240
ctgctcatat gagacaagct gccttacagg 270

<210> 10475
<211> 200
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-C11

<400> 10475

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tcgactagct gctgaattat ctggcttaag tcgtcagtat ccggcgggtcg cacgtaagtg 120
ccttggaat tcgggagaaa tgccgcgtct agtccttcc atgagggggt tgactttgcc 180

ggcacgctac tttgccagt

200

<210> 10476

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-C2

<400> 10476

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agccgacacg tatttcctcc agccaatgat gattttacac gtggaaaatc cccattggtc 120
ggggctgtta acggtttatc ggatccaaaa cccgaccga tagcttaacg acgttccatt 180
acggtggatg ccacgtgtcg gtcacccttg acgaaatcac tttgtgaca cgcgatttat 240
cgtcatggaa gtgcacactt ctgtgatgat aattttggta aagtcatgga acacttctac 300
gatagcacag gtatgactat cttgattctg tcataaaatc gtcattggatg tacatgcatg 360
acaaaaaac ggcacctact gtgacaaaca cgtatcatca cggaagtgta tttttttgta 420
gtgattgtcc 430

<210> 10477

<211> 355

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-C3

<400> 10477

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cagtatgtta ctttcctatg atatcatgat ggcttgctta tattactctc aacatttagt 120
ggggaaatat tcatgctcat aacatgcttt tcttaatat gactccaact tgatatgatg 180
ttgtatgcct cttggtgccc ctacccttcc taatcccaga acctttcaaa gtaaagtggc 240
atggcagttg caggtgggta ctggctcgat cagacaacgg ctaacgattg atgatcttcc 300
tcagctaccg gacgtgttgt ttccgcgaat acaatcatat tcactggata ggtct 355

<210> 10478

<211> 456

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-013-Q1-E1-C6

<400> 10478

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ggcggttccc aaacagaatg gtaaagttaa tactccccct ccaccaacaa gcatcaatcc  120
atggcttgct cgagacaacg agtgcctcca actaacaaca gtcccagggg gggttttggt  180
tgcaattatt ttggtttgat ttgcataaag catgggattg ggcattcccg tgaccagcca  240
ttttctcgtg agtgaggagc ggagtccact cctcttgaga ataacccgca taacatggaa  300
gatacggata gccctaattg atacatgagc tatttgagca tacaagacag aatttcattt  360
gaaggtttaa agtttgggac atacaaatth acttgggaac gtaggtagat actgcagata  420
ggaagggtata gtggactcat atggaataac tttggg                               456
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<210> 10479

<211> 439

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-013-Q1-E1-C8

<400> 10479

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gtccaagact cagaagtcaa attcatcctt gctttgcctg cttatggtga tctttggggt  120
tgttttgctt atcgtgataa tagttttggc atcttgagac acggatgctt agaggcctat  180
tggtgcccctc tgaggagcca tattacgtgc aagattaatc ctgctgtgc gccgaagact  240
gtcgctaact gaagtgtaca ttttcttttt ctctcttctt ttttcttgt ggtttgtgag  300
tgcgtattct tgtgtggcgc gagtcctttt tttccacgg cttgccctga ctgaacagtc  360
atgctctttt tcacctacaa aggtttgttt gctgctttgc ttgagtcaga aacttgacat  420
tctgtaagta tttccactg                               439
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<210> 10480

<211> 299

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-013-Q1-E1-C9

<400> 10480

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agcatctggg ggcgcagttt ggggtccaagg cagcgatcgc ttttaagcatt cttattccaa 120
gcactgcaaa gtattcacac tgcacggggg ttcgtcagac gttcacattg cacagttcgg 180
ggagcttaat ccggacctgc tgttctctgc aagtccacta cgagaagcac aagtctatgt 240
gctacaggct ccatgtctat gtctctcctt tcttcagggt ctatagggga gctcagggc 299

<210> 10481

<211> 312

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-D1

<400> 10481

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ctggaggaca tgctgcaacc cgggactgac atgatccccg ctggccaccg catgtccacg 180
acctcatgca cgctgtgtg tagcaccggg aaccgggtgtg catggcatca ctcttcacg 240
ttcccttagg gactccatac ttacgcaacc caacataaag atcccaggca aggggaaact 300
ctattcggtc aa 312

<210> 10482

<211> 323

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-D11

<400> 10482

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ccctagcaat accacctcaa actggactag gccttcacct tcaccgcaag gggccgaacc 180
aatataaact cctcgtgtcc tttgtcccggt ttaaccctt taagctaacc tcgttgtaat 240

ggctccacaa ctaagtcctt ccatgaggac atctgccgtg acacttccac ggcaacttca 300
atgcacatgt tatgaaacaa ttg 323

<210> 10483
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-D2

<400> 10483

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atcaccatct cctggatgcc ttgatatctg tgttgctttg ttgatggttg tgtagctctt 120
gacataatcg gctactgtta acaacttgaa ccagtaataa tctgcttgat gatagaaacc 180
ttcttggtcc ttcagaataa cagagctaag tgcaggggcc atttttctga acgaaacact 240
ggattcaatt aagagaaaaa ggaaacactg gatttctcca ccatatggca agcataaaaa 300
gatgtctaatt ttggtaattt tcaacgcctt acaagttact gtacttgaat aaccagaaag 360
gaatatatgt tcttttacag gtccagtgtg gtccttcat tcaggggaca cagagtgcag 420
agtct 425

<210> 10484
<211> 256
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-D5

<400> 10484

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ccccctggcg aatggaagta gcataactcg gtaatcatcg ccggtgatat gatcgatgat 120
tggttgatg ctcgataat tgagcccag gaacatggag tggttgccga cgctgtaaac 180
ccgctccaa ttgaatacgc ctggccaaac aaagctggga tctttctcga acacgaagca 240
gccagagccg tcaatg 256

<210> 10485
<211> 400
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-D6

<400> 10485

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tgtttgttggg tcctattgtc gtggcgtttt tgctgtctgc gtcttgttgc tgctcgttgg  120
gggggggggtt ttgcctcgtg ggtcttgttg ctgggggtctg ggggtgctggg gtttcgcgtc  180
tggtgtcttg ttgccgttgc gttccgggcg tcgtgttttg ctgtttcggt cttgttgccg  240
cgtgttgggg aagaggagat ttttgtcaca tggctcttgt tgcagaagag ttacacgaga  300
agaggtttca cagcaggaac attgctgcaa gaaattagag aacaggaatg gtccgctcgc  360
ctcctacaat ctgacagctc acgaggcagc ggggtcttttt                                400
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<210> 10486

<211> 218

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-E10

<400> 10486

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atgtgggcat aaccacctg tgcgcgcctc ggcccccagg tgcgccctgg tggttcctgc  120
gggccttggg gcatccctct cttccctctt cagggcatct tgtgtcttct ggtccactat  180
ctaaccacac ctagttttgc tgcttttcga ctcccttt                                218
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<210> 10487

<211> 394

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-E5

<400> 10487

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cgccggatga gatgggtgag ctgatgacta aaatggaaga ttttacgcac cgagggtggg  120
tctgcgatca ctccatagtg ttctgagggg gattcaattc agcactagac agccaaaagg  180
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aagacacaat aagctggcca agctcatatg catgcacctc tgccaactga accatctaata 240
acctcaccgg agtatgtaat gctatctacg ctgatgaatg aattatctgg tgcattatgg 300
ttagcaacat ggcattgtgt tctgttttcc ctcatgatac cggctgtcca gtaacttgct 360
tttaactgaa cttctattgg attgtcttag ctta 394

<210> 10488
<211> 408
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-013-Q1-E1-E6
<400> 10488

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cgttggcggc ggctgtgccg cttgtcctgc tctcgcgtgc cgggggtggc gcggcggccc 120
tgtccctgtc tggcctgggt ttcgcccgcc tgcgcctggc ccttgtggct ggctgctgg 180
gccgcgtcct gggcttctca gtcactgcc ctggcaccac tgcagctgac ctgatggaca 240
tgggtgctgat caccagtagc ttgccaacta tgacagaagt tggcgcgtcc tccaagtcct 300
cggcgggtgt catcccccat ggccttggt ctgtgctcga catcgccacc agatccgcat 360
tgtcttcttc acggccagtc tgcctctgac aactaagcac ctttgctt 408

<210> 10489
<211> 66
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-013-Q1-E1-E8
<400> 10489

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tgctct 66

<210> 10490
<211> 245
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-013-Q1-E1-F11

<400> 10490

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tgcacgcagt gccaggcgaa ccatgccagc gccaccagcg aggagtgcac cgtggcttgg 120

ggagtttgca accatgcatt ccacttctgc ggcacacccc gttggcacat gacacgtcac 180

gtgtgccatc tccactacag cgagtgggag ttccatacgt acggtgactc acatcggtat 240

ggcca 245

<210> 10491

<211> 199

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-F4

<400> 10491

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catcaatatt tgttctaacg caagcattca tcagatagag acaaaacatc ggatagaggg 120

aaacataaat cgtccagaat aagaatatct ttctggctaa gcttacttac gaatgttggt 180

gattaaaaca ttatacatg 199

<210> 10492

<211> 157

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-F5

<400> 10492

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ttcatcactt aacgcaatcc ctccgtcact gttaatcaat aggggggggat cgctgttgca 120

tcatttttgt tctagcttat tcttgactgt ttcattc 157

<210> 10493

<211> 441

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-013-Q1-E1-F6

<400> 10493

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aattttcagt aaacccttg ttcttttgct taataaacc acagttctat ttttaagga 120
gtttaagac tttttaaaat actagcaagg cgacccatgc gtcgcaactg aagaaaaaa 180
aatcataatc tctaattggtc atgaccacat tttgctgcat caccgagata cactatcact 240
ttcattttcg tgaaatcgtg aacagttttt gacaatcatg aacatttttt tagctgagga 300
acatatctgg aatcgtgaac attttccagg tacgtgaaca attttagaaa agtgcaaact 360
ttgtccagag tcataaacgt gttaggaatt catgagcatt ttatactagt tgcagaaggt 420
gggggattat gaacattttt t 441

<210> 10494

<211> 441

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-F7

<400> 10494

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ctacgacttc tggctggact tcagctcgtg catgagccgc tgccgccagc cctccgagt 120
cgggctcctc cgcgaggact acctcgagt cctccaccac tccaaggagt tccaacgcag 180
gaacaggatc tacaaggagg agcaacgtca gataagagct gctgctcgca aggccaagga 240
ggaagccgaa ggagctcctg ctgttgacgc tcaccactag catccctttt caattttttt 300
cttatgcttt tgtttgttgc aagcgcttcc atgttcggct atgagcaagg caataattac 360
ctaaacattg caccctcgca cctccatgac ttgttctaaa agcatggatt tgatagacta 420
ccttggtcat caaatttgtg c 441

<210> 10495

<211> 151

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-G1

<400> 10495

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tcgtcgtcgg gtttgcttcg ttctttgtgc tctgctgtcc ggggcggggg ccggcgttct 120
ttctttgcct cccgggggggt gggtccttct t 151

<210> 10496
<211> 313
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-013-Q1-E1-G10
<400> 10496

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atccacagta tgggtggagaa cccaccttgc aaagccgaag acttatatcc gcatactata 120
tcaggggtga aggcaacttc gggggctact gagggagtcc tacattcggg ggtcctcaag 180
tgtccgtccc atgagtatcg gccaggttgg atgggtcata cactatcaag ctgaagacta 240
tccttcgtgt ccatgtggga cctctccata cgtaaaactac aagattagag tccagatgta 300
tcatttcctt ccc 313

<210> 10497
<211> 187
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-013-Q1-E1-G12
<400> 10497

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ctctgttaca ttttacaatt tttcctactt tacatctatt cggggcttca gacctatact 120
ctactaaaat actatgggtca attctcttag ttcatcacat cctactcaat ctaatccttt 180
caatttt 187

<210> 10498
<211> 139
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-013-Q1-E1-G2

<400> 10498

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gctggtttcc gcttggtgc 139

<210> 10499

<211> 169

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-G3

<400> 10499

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tcaccactt gttgctgctc gattcttggg acggggatct gtcgatctcg aaaacattag 120
tgtcgtctca ttacttacc cctcttatac atatccttct ggttttggt 169

<210> 10500

<211> 203

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-G4

<400> 10500

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gcgcgcgtcg tctgttttct tctcgcgggc gtgggcgtg cggctttggg gtgggggcgc 120
tttctccgtt gggtttgctg tggcgccccc ttccctcggg tgcccgttgt ttcttcgcgt 180
ctcgtccttg ggtttctttt ttc 203

<210> 10501

<211> 90

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-G6

<400> 10501

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ttggcctggt tgtttgtttg ttctcgttct

90

<210> 10502

<211> 280

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-G7

<400> 10502

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cgctgtgctg ctgcgtgttc tgtgtgctct tgttcctggc tgtcttgtgg tctcctgttt 240

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<210> 10503

<211> 325

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-G9

<400> 10503

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catccggctc tgtaaccatc ggtgatgata gaaatccact gttttttgaa cggagagata 120

aactgttact accccggggc ttttttagat cttggagacg ataagagtgt gtgaatagag 180

caaccctagc aagcaagcgc ggatgctccg ggctatatat acataatggg gtagttttcc 240

tttttcactc catcaaaaca aatcgtttac aattgtgtac tactacatgc cacgtccgtg 300

gttttttttag atgttgattg ctttt 325

<210> 10504

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-H11

<400> 10504

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cctttttttac tcatgacaag aaaactcgct attactttat ctaaaattag ttcctttctc 180
attaatgggt gatgctaaag cttggtacaa tactcttact cctgggttg tgcgtagtcc 240
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cttgcataaa atatttaact ttgttcaaac taaaaaagag agtctcccaa aagcttgggg 360
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<210> 10505
<211> 330
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-013-Q1-E1-H12
<400> 10505

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aggagcagac gacgattcag acaagcaacc acgcacgccg acaagcctag gagagttcac 120
ttaggacctc gagaagagca gcgccagac cttccagcta gacagaacca ccgccgacgc 180
atctgtggtc aacattgtcc ggctcgactt ctctcgaag catgggcagc ctgagctggc 240
gtgcatctac cgcttcaggg tgcacggcag cgagcctggc tctcttcgc accgcggcat 300
cgtgaggcct gatctagtta gggcctgtgt 330

<210> 10506
<211> 275
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-013-Q1-E1-H8
<400> 10506

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agggtgctcat agaaggaagg gtttccttgt gtgcatccaa aaaggtagt gtatgcgtgt 120
gtgcattcat agaggtagt gtatgcgtgt gtatataacc ccttggtgtc gtactaatgt 180
taaaaaaaaa gtttctgaaa agtaagaaat aaacaaagag tagtatattg tgtacatatg 240

agccggacac accagcgagg gtccccaaag ccaac

275

<210> 10507

<211> 218

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-013-Q1-E1-H9

<400> 10507

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ttgtcatggc aacatgggag gcatgttata gcacgtgggtg ggcatcggcg catagcaatg 120

gagcgaacaa cgagcaagca aagatataag tgatttcgag ggtatgggtca ccttgtctga 180

gatcccgcaa ggaagaataa ccatttcatt aagaagac 218

<210> 10508

<211> 261

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-014-Q1-E1-A12

<400> 10508

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tataacatta cgcacagttc gctccagccc tcgctcgagt ggcagctcgt ttcatagtcc 120

cggagggcct agcaacctta catcattacc acgtggggct ttcaatctgc tgacttttcc 180

tctcccagca gtgagggcga gaggattctt aagccttggtg gaatattgtg atgtattgga 240

tggaacactg gagtgtcact t 261

<210> 10509

<211> 215

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-014-Q1-E1-A9

<400> 10509

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cctgcgtata ctaagtgtgc agatctggca taagttttat ctctgggatc tccagcactg 120

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cgctgtgtcc caggagctgg cccagcgagg ggccc 215

<210> 10510
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-014-Q1-E1-B10

<400> 10510

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atctggagaa tgaaatatac tcaggcgggg ctccctggat gattctttca aagacaaatc 240
ctcaagtgac ttgtttcttt ggatttttat cctttgccct ctactcttcc cttttcaccc 300
atcatcgctc cccactccc acacctggga agatgcaatg cctgtggctg aagcagcagt 360
tttgcaaacc tgagaacaaa agacatgtgt tgctaagcat actgaagga 409

<210> 10511
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-014-Q1-E1-B11

<400> 10511

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atcaaacgat gctgtttcat ctaatgacc tgttgaacag gggggctctt ataaatggtc 120
acaatttcat ggttcgaaat tttcgatgtg ggcaaccact acaggatcaa gtacagctga 180
agggcgtga cctcctcact ctacagaact ttacaggaga agaaattaag tatatgctat 240
ggctatcaac acatctgaaa ttcaggatac accacattcg acagtatttg cctttactgc 300
acgggaagtc cttatgcatg acttt 325

<210> 10512
<211> 404

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-014-Q1-E1-B12

 <400> 10512

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 taccaatcat cagattaaga ttactttctac actgcgtaac tttgggttga caatgagcct 120
 aattaagggc atgatattca ggcactttga aaccgtgggt cacatgtgac accatctgga 180
 gaatgagata tactcaggcg gggcttcctg gatgattctt tcatagacaa atcctcaaatt 240
 gacttgatc tttggatttt tatcatttgc cctctactcg tcccttttca cccatcagcg 300
 ctccccact cgcacacctg ggaagatgca atgcctgtgg ctgaagcaac agttgtgcaa 360
 acctgagaac aaggggacatg tattgctaag cagactgaag gagt 404

<210> 10513
 <211> 331
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-014-Q1-E1-B9

 <400> 10513

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 acacgatcaa aagatgctgt ttcattcaag gaccctgttg aacaggggag ctcttagaaa 120
 tggtcacaat ttcgtgggtc gaaattttcc atgtgggcaa ccactacacg ataaagtaca 180
 gctgaagggc cgtgacctcc tactctgaa tcaactttac acgagaacaa attaagtata 240
 tgccatggct atcagcacat ctgaaattca cgataaaaca caaaggaaag tcattgcctt 300
 tactgcaatg gaagtcctta agcatgattt t 331

<210> 10514
 <211> 200
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-014-Q1-E1-C10

 <400> 10514

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catcaagttc cctaggtgtc aagaaattcc attctgggag gcaagttcgt caatcaaatt 120
 tgtttagaag tccaacacaa ttagaccatc taaacaagcc gcacagttgg ctcaaatact 180
 aatgttctag taccagaatt 200

<210> 10515
 <211> 378
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-014-Q1-E1-C9
 <400> 10515

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 catcggggga cggaaatata gtggagaatg gagttttcat gtcaccagga cacctttcca 180
 tctcaactcc atctctctcc cagtctcctt ttgggacatt acgtacgact cgaggataca 240
 aggaaaaacc atgttttgta ctgagaaact gagatcagta gctcctacct ggtgtcctgt 300
 tccttcagtc agcctctcaa ggctctgagc cctaatagcc tcctgcaacc ctgaggaatc 360
 cataacttaag gggacggt 378

<210> 10516
 <211> 444
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-014-Q1-E1-D10
 <400> 10516

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 aactcacca caggatacga acggaatcat ctcacactgt gaacgagatg catgctgac 120
 cttcacagtc gcgactctct ccatgtgagg tagaacgagc accatgcatg ttcatacaaa 180
 ggcttctgt cataactagta gcccgaggac gtggacgaat gtaccttgca gctcagctca 240
 ctctaggagg accccccggc cgggtgccat cacctgtgcc acaactacat cggcggtat 300
 ttctgtcct gccgtccagg ctatgagctc cagccggatg ggcgttctg ccaggccgaa 360

tgcagcagcg atctgttcac ggagccctca tgctacatct ccagcttggga gtacccccgg 420
ccctaacccc ctgacctgcc ctgc 444

<210> 10517
<211> 375
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-014-Q1-E1-D9

<400> 10517

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gtactttaga tcgagtcctg tcttcatacc gatagtcac gaggatgtca tgtagcgaag 180
tttatggta gttcaccatc gcagaagcac gctgagcttt gcttgatcta tccagggttg 240
tgctttgtgc accttgaggt tgcagcatcc tgtctacttg caggtcttac agtcgaatct 300
ctaacatctt cgagtactgc ttgtaagtta ccacgcagct ggagcaccat catctacgag 360
gcttccatag actct 375

<210> 10518
<211> 352
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-014-Q1-E1-E9

<400> 10518

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cctgcttctg agttatgacc tctgtcggac gtttatccaa gacaggggta cagtgtgtat 120
aggcccaggt gggcaggagt cattcgggtgc tagttgacct tcgtcgacgt gcagtcgaag 180
ttccatcacg acacctgcaa ttacgatacc tagcacgcct tcgtcgttca tgactaggac 240
taccacacct ggtatgctgc cggattcctg agcttttacc cgtgcagtac tgttcctgac 300
tcttctgtgt atatgaacgt gaccaccatt ctggactggg ttcggaacat ca 352

<210> 10519
<211> 431
<212> DNA

<400> 10521

cactcctcac aagtaactga tacagacttc agtcaggatc tcatagccag gatatgctcc 60

acatctgata agttttctca cgattagtta gggatcatg ctcagatgtg caccgtctta 120

tttgtggctg gaactctcgt gatttatgct gtctggcatg ctcttattgt tgttttatgt 180

ccagcttctg aaccgcatgg actgtcagt agatcattaa ttgaggcttt acacccttcc 240

agtcattcgg cacctccact gagagtaacg ttgtagtcca gctgatgatg ggagtgattt 300

gcctgtgatt gttattggcc agcatatgtc tgttgtaccg accgtagtca cggaggatga 360

ctgcgaagat accgtgtgat cagggtccgac ccgttggtcg ccataggatg ggg 413

<210> 10522

<211> 405

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-014-Q1-E1-G9

<400> 10522

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ttcattaagg taaaacccaa ccatagcatt aagatatatt ggtccccctt caatcccgtta 120

tgcacatcaatt tctatgctag gttgaagctt ctgttacact tgccctccaa tacatactcc 180

tatcatcata caactaacc tatgggtgtga tacatgcgcg cattcatatg atgggaacca 240

aaggacaaca acatatccac atgcaaatta aatcaatcat agcaattcat caaccaccga 300

taggacaacg acattctact cagacatcat acgatggcaa cacaccattg gataacaaca 360

tgaagcacia agcccaatgt ccacgtagag ggtactacgg gttgc 405

<210> 10523

<211> 217

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-014-Q1-E1-H10

<400> 10523

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gctaagaatg ttaagatcct catcaggcct gatggcacga agaaggcgta tctgaagcat 120

gacaccagcc tacgatgctc atgacttggc atcaccgttg gggatcatct taccctgagg 180
gagggtcctg tcatatctgc ttgagctcgt ggtgaca 217

<210> 10524
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-014-Q1-E1-H12

<400> 10524

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gagatgctct tatccgtgca cgggtcacct cttggaatgt acaaagagga aaatctggca 120
gctattaccg aatctggaaa cggaagcgaa gagccgcctc acgatgccag tggccatcaa 180
tagtagtagt agagcttaac cggccctcaa cataaaaggc taggaatttg atgctgcac 240
ttctcttcag gccgaagctg ggacaccaat cgaagctcca accaccaatt cagtgtgctt 300
gcagcagcat ctcgagtccc agcgtcagct gagagtctcc gacaagatgc agtgcggtgtg 360
taggctatca tgtttgatat aagatcttat catgtttgat gtgttgcaag tgcaagcatc 420
tgagtcatgt ttttgtttgc tataaatcat accat 455

<210> 10525
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-014-Q1-E1-H9

<400> 10525

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tccagcacc cactgatagg cccagggccc ccttgcac 120
tgcggggtcg gtggcctacc ggctgcagt atcagcatcc caaccctgct ctccctgctg 180
tctctcctga tcatcagctt catcttatgg aaaacttgcc gccggttgct ccgggtcacc 240
catccccgcc tgccatccac atgagggggc caggaatctg aattgtggaa tgtgacaccc 300
acaaatggcg ctgagttata ttaatgcctg cgaacctctg ctgctgaggc ccctggagct 360
accctgctcc tttcaaagac ccattcatca ataatccttt tgattctgaa agtccttgca 420

atcaagtccc cagacttt

438

<210> 10526

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-A3

<400> 10526

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agtgaagata aggttaggca atgtgttgac tcaagacttg gaggggacta tcctcctaag 120
gctgttgcaa agtttgcagc cgtcgctgca ttgtgcgtcc aatacgaagc cgacttccgg 180
ccaaacatga gcatcgctgt caaggcgctc cagccccctgc tgaacgcgcg agcagcccac 240
cccggggctg aacacgctgg acgctaagct gactcgggc cttttgtatg atataataga 300
taaggaaaaa tgagccatca attgttgttc ttgcggggca tgtggcaagc ggtttttcta 360
catttgtgat tattcttccc aagtgtaac cctcgagatt ctagtaccag aaatatttga 420
ttccttgtat cggttgc 437

<210> 10527

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-A4

<400> 10527

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tctctctctc tctctaagc cactgggccg tgttactgtc cactcgacgt ataactgatg 120
cttcaaagt taggcatgat ataagtaa cctgtttcct ttgaagagat agattttcac 180
atgaaggatg gcattacggc agtaggaaca ctctcttggt ttgtttgatg taacatgtcg 240
ggtttccact ggcattatac atatttgggg ctggcgagca aatttatggt gaacaatttt 300
tgtatacacc tttaccagc tagcaaaaaa ataactttt ccatttagta ttcctatgctc 360
aacacaacca tgagtgtaac ttcttttga aatgatgtta ttactacaa tgctaccctc 420
ccatctctc ggattgggg 439

<210> 10528
 <211> 413
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-015-Q1-E1-A5

 <400> 10528

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 cacgtacgcc atctcgtctc gtttatcatc gtctcgccgc gtaccgggtt gccccaacga 120
 acgtccctct ctccaccaat ccaatattcg aaaccgctcg agaaagaaag caccatgcaa 180
 gatcgagata gcctctgtcc ttgcttgagc caacgtacgg agccgcgtaa ggaggaagga 240
 actgcgaaac tgtagtatct gccttcctaa tgggcccagc aggtctcca tccgatctgc 300
 ccatataagt tgagcaccgc agccttttcg gcccatcgct gtcgcctgtc ccagttcccc 360
 tgttcaatac tgcgaaactg ttgtatgcag tgctgtgccc gttgtacatc tac 413

<210> 10529
 <211> 430
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-015-Q1-E1-B1

 <400> 10529

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 gttcatgcga gtccctaaaga aatatgtccg taaccgtgct aggccagaag gaagcatctc 120
 cacgggccat caaatagagg atgtcattgg gttttgtggt gacttcattc ctggccttaa 180
 gaagattagt ctccctaaat cgtgggtatga ggggagacta actagaaaag gcccgctagg 240
 aggggactca ataatatgca aggacgggca ttcttgttct caagcacact acacagttct 300
 acagaactct accttggtga cctcgtatgt cgatgaacac aagaacagtc tatgctccaa 360
 acaccgaag cagtgtgatg attggattac atgtcaacac atcaggactt tcggcagttg 420
 gttgggaaca 430

<210> 10530
 <211> 416
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-B4

<400> 10530

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aatgacataa cacagaagaa tcatgcctaa gtaaaaagat atatgaaaga actaaaacgt 120
aagcgcatca tgtataggga gtacgaagaa aaaagatgaa aatgttaaaa aaagaacaaa 180
gcaaaatgag tgattatagg gtgtgggtcat ttacgctttc aactccttca tgtgcttgct 240
gctggccctc gcattttcaa accgcttgat gatgtcgtag agctgggtct gttccttagt 300
ggccctgaat tcgggctcgt agtcttccgc gggaggtgcg tgaactaccc tctgctgtct 360
cacagaacca agggtcgctc ttctgatggt atcctcagtt gccgtctccg cagtca 416

<210> 10531

<211> 384

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-C1

<400> 10531

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acctgaaatt tgaccgtttc ttctgctggc ttgaaagaag tagatttggg tcatttgtcc 120
aggataacat cgtctctatc caccctggag cgtagtgagg ttagttcttc agccgcaagg 180
gccttagata atgcctcgag ggccaaggat gcggttttgt tctcgggtgag gagggtctatg 240
tccggatcgc tgacgagggt gattattcca ttaggcccgg gcatttttag ctacatatat 300
ccataatgag gtatggcttg aaagcgcatg aaggcctctc gccctaacag ggcattggtat 360
cccaaaaaaa agggagagcg gggg 384

<210> 10532

<211> 440

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-015-Q1-E1-C2

<400> 10532

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aagaggaagc cgctgaagac gatcgagaac ctcaagaccg agacgggcca gatgaagtcc 180
aaccatgacg cccagatcct ggcgataagc tcgggcaagg atangaatgg gatgaggctc 240
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taccgcaggt gcctggactt cagccctggg agcgggttcc tctccgtcgg gcacgccggc 360
ggaaaagtgt tgctctacaa gctgcaccac tatcagaacg cttagggttc ccacagtcca 420
gttttgacac tgtatttttc 440

<210> 10533
<211> 415
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-015-Q1-E1-D1
<400> 10533

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tcggaggagc tacagttcct taggtcaaaa ctgacactca tggagagata tgccaacata 120
ctccacatct caatattccg caagcccatg gacgaacgga cacttcctcg ctacttcaa 180
gagtctgcag tctttgatat cagaaaggaa tttgagaaca tcttggttc gtcggatact 240
gatgagctcg ctgccttgga gatgttttac cgtagcgtgc tttctggtgt taaggacaag 300
cttctcaaga gaaaagtga agtgatggc caagaatgca ttgtttcact ctctgcaggg 360
aggcaaacc cgcgtggtca gtgagttgga agaccgttgt tataaactgc atttt 415

<210> 10534
<211> 410
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-015-Q1-E1-D2
<400> 10534

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ggacagctgg ctatccagat gcagcaccag cgaccccagt acatctgaag ttagagatgg 180
aaacgggaaa tcacggcgca acagcaataa caaacgccgg aataaagaag acagaacgaa 240
gggcacggca gtaaattgccg gattcaaaag ctctcagcca ggccaaaagc cgccccctaa 300
aggcaccagg gacgaattgt ccagcccctg gtaaacttgc taatcatacc cagtagataa 360
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<210> 10535

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-D3

<400> 10535

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tcagcagagc catcagggcc gcggtgattc ctcccaactt caggttgggtg actggagtca 180
gcaagttcaa cggtagagtct aagcccgata cttggcttga ggactaccga gtggctattc 240
agatcgacga tggaatgac gaggtggcca tgaagcatct gcctctcatg ttggaagggt 300
caaccagagc atggttgaat cagttgacac ccagcagcat ctacacatgg gacgacctct 360
cctgagtgtt tgtcaggacg ttcgaagg 388

<210> 10536

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-D4

<400> 10536

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acccgagggtg ggcacaacc accagggcgc gcctgggcct cctagcgtgc ctggtgggtt 120
gtgctcccat cggagcacc cccatgtgtt gccttggccc attgggtgtc ttctggtcca 180
taaaaaatct ccgtgaagtt tgttgcatth ggactccgtt tggattgat ttctgcgat 240
gtaaaaaaca tgcagaaaac agtaactggc acttggcact atgttaatag gtagtagca 300

aaaatgatat aaaatgacta taaatgatta taaaacatcc aagattgata gtataacaac 360
atggaacaat caaaaattat agactcgttg gggacgtatc agcatcccca agcttaactc 420
ctggtcgtcc tcgag 435

<210> 10537
<211> 370
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-015-Q1-E1-D7
<400> 10537

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ccttgtccag atcgatcctg ccgccagcga tggaaagatg ctgctccgcc gctgcctgat 120
cttcgctct ctctctcccc cctgggtccaa atccctaatt tttccccaag gattcaaccc 180
caaactttct aatccccctct cagatttgct gtgggctgct cttcctctgc tgctccagat 240
tgaactcgcc ggcgctgatg accgcggtgc cgctgggtgg tgcagggttaa cgctcaagtg 300
tgcagccatg gagcagatcg agcatatgtg caggtagaga gatgaagacg gtggggaaga 360
caagctgttg 370

<210> 10538
<211> 441
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-015-Q1-E1-E1
<400> 10538

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atcaagtgg atcagatttc caggttgctc agtgagattt tacagttttg cgtagtttag 120
atcgagtcta ttcttcatac ctacagttca caaaaaagcc aaaaaaatta gggtagttc 180
atcatatctg aaccaatcta agcctttgca taatcttttt agggttttgc attgttgaat 240
ttgcggttgc atcgctgtgt ctagttgctg gtcttagtgt ctagtccttt agagtttcga 300
gttctgtcca caagttttca cgccgctact gcaccatcgt catcaccgct gccatatacc 360
accatcgtcg tcatcgtctgc catataccac catcgtcatc acgctcccat ataccaccat 420

cctcatcacc actgccatat a

441

<210> 10539

<211> 431

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-E2

<400> 10539

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gaggctttcc gaattcttgc caacaactac cattccatcg actaccatgc cacctatcca 180
gagatcgaga agctgatcga ggaggttgcc gaggtcctga tgaggaacga cgacactgat 240
gttgcgctgc atgatcttgt cgagctcata aagttaaaga agaaggatgc gactgagatc 300
aaaactgaaa gtaagaagac agagaagaaa gatgccactg atgacatcaa gattgaggct 360
acgcacgtgg atgggaagaa agatggtggt gagatcaaga ctggaagtgt gcaggtggag 420
gagaagaaag a 431

<210> 10540

<211> 373

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-E3

<400> 10540

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gctcggtgag attttacagt ttttcgtcgt ttagatcgag tctattcttt gtacctatag 120
tccactaaaa agccaagaaa aattagggtt tgttcatcct atccgaactg atctgaacct 180
ttgcataatc ttttctgtat ttgctttggt gaatttgagg ttgcatcgtc gtgtcaagtt 240
gctggtctta gtgtctagtc ctttagagtt ttgagttcag ttcacagggt gtcatgtcgc 300
tgctgccata tatcaccatc gcatcatcat catcgctgct gccatatacc accaccacac 360
caacttcacg gtg 373

<210> 10541
 <211> 439
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-015-Q1-E1-F2

 <400> 10541

 gtccacgagg ccttcctagc taagtatgat gtcaagccga acaatgccat tctcgccgag 60
 gacaagcact tgcccatgta cgatgagttg tccagcaagg aaaatgttga atacattgct 120
 ggaggagcca cgcagaactc tatcaggggt gcccaatgga tgcttcaaac tcttggtgca 180
 acaagttaca tgggttgcac tggaaaggac aagtatggtg aggagatgaa gagcgccgct 240
 aaagctgcag gagttactgc tcattactat gaggatgagg ctgctcctac aggcatgt 300
 gctgtatgtg ttgttggtgg cgaaaggcca ttgattgcaa acttatctgc cggaactgc 360
 tacaaatctg agcatctaaa gaagccagag aactgggcac tagtttagaa agcaagatac 420
 atctaaattg ctggctttt 439

<210> 10542
 <211> 432
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-015-Q1-E1-F5

 <400> 10542

 cgggtcgaca aaaatatgca atagacgata atacattggt aaaaagcagc gctaattttt 60
 aagaactaac cacagcgcca gatatgaata ctttttcaaa aaaatgaaca cttttcttgc 120
 aaagtgtaaa gaaataatta aaaggcaagt attttttgaa agtctgaaca ttttgtgcta 180
 gatgtgagca aattccgaaa ttttaaactt ttctgaaatg cgatttgcata aaaatgttaa 240
 catcttttgg agttotgaat ttttttttaa aagtgtgaac ttaacaacat gaacaaatat 300
 tgaaatttca aacttcttcc caaatggcg aacaattttt gtagaaagt accatttttt 360
 gaaactgtga atttcttgaa aattctgaac tttccgttca aataatgaaa aatccaaaaa 420
 attctgaaca aa 432

<210> 10543
 <211> 437

<212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB31-015-Q1-E1-G2
 <400> 10543
 ttcgacatta cactctagaa tgactcgtat caccacccat ggagcttcct cctttccgtc 60
 ttcagggtgag ttcgccccct cctctctctg ctcttggttcg tggccattga ggcattgttc 120
 ttggttagga tttaccactg tttgggctca attgggtact gtttgaggtc aattttgtgt 180
 atactattaa gtgttgattg tttcttgaat tgaacagcaa ggtagacat gaatttgta 240
 gtagaataga tccctgaccg aactgcaatt gtagttgaa ttgtccaatc ttgaatttag 300
 ggagctgcta ctgaaagggt tttttcattt tgtatgtcat gggttggcca tcaattttat 360
 taaacagcaa ggttaaccac gatcacacga agccgaagggt gcacgatgaa gaaaccgtac 420
 gtgcatactc tatccat 437

<210> 10544
 <211> 441
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB31-015-Q1-E1-G3
 <400> 10544
 ggtccaccag cactggtcaa ctgatacaca agcttggagg tattgacaag cgtgtgatcg 60
 agaggttcga gaaggaagcc gctgagatga acaagcggtc gttcaagtac gcctgggtgc 120
 ttgacaagct gaaggccgag cgtgagaggg gtatcaccat tgatattgcc ctgtggaagt 180
 tcgagaccac caagtactac tgcaccgtca ttgatgcccc tggtcaccgt gacttcatca 240
 agaacatgat tactggtacc tcccaggctg actgtgctgt gctcatcatt gactccacca 300
 ctggtggttt tgaggctggt atctccaagg atggccagac ccgtgagcac gccctccttg 360
 ctttactct tggagtgaag cagatgatct gctgctgcaa caagatggat gccaccactc 420
 ctaagtactc caaggctcgt t 441

<210> 10545
 <211> 355
 <212> DNA
 <213> *Triticum aestivum*

<223> Clone ID: LIB31-015-Q1-E1-G4

<400> 10545

gtccaccagc ccccgccagt ccatcaccgc cgccaaccca agaactgaac catggcgaag 60
atcaagccaa aggcattgct ggcacagagc aaacagaaca agggccctac ccagatcggc 120
ctgttgagga tcatgacctt catcgctctc ggcgccttag cagtgtcctc cgtttactat 180
gcctatcagt actggcagag caaaggaccg gccgttgagg cagcagcagc ataatgcgcc 240
gtgggaaact aaagccccag gaatgtactt gattttgctg ctgttggtgt agtgtcatgt 300
cgtttttttc tgggtgttcgc agtccggtta atttgtgaaa cattgacaga gcatg 355

<210> 10546

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-015-Q1-E1-H1

<400> 10546

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tcgtccatca ctcatgtcga gcccaaagt ggcaccgat catgtccatg gctacttggc 120
ccgggtcggg gcggggcagg gagcctgccg acgtcgggtg aggcttaaaa ccttgcagtc 180
accctcgcca taatagccga tgtccgaagc agagtgaaca tagttgggag gcgcctggat 240
ggcatcagct tcaccaatta tgttctctc aacatgctct agtccaaac tagcaccaac 300
acccatagaa acctgaatgg cagccatgta acatagaaac tgtatggatc tcgatgacat 360
aggcaaagt aatccaaatg taaaattcat tttaaaatat gaattattgtg gaaaatgtac 420
acatgtctga gaaacaacgt 440

<210> 10547

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-B6

<400> 10547

ctcgcgggtc gacgacatgc tgtacatcga gtcatgggac aggaacagga gcctcctcat 60

cggctatgca tgtctcttcc agagacactg aattcaccgg cgcggcgcct cactggagg 120
 cagagttatt gatgccttcc tggctgctgc cgtctgaaaa cccattatg cttctagcct 180
 tacgctcaac ccacttcagg ctccacctga taaaatttgt aagatcaact cggtagctct 240
 tggcatcagt tgagctgcca ccgcaggaga ttccatctcc ctctcaccg cgttgctgca 300
 ggcttagctt ctctgcaact ggttttgcag gttcatcagg gcccttggtc tttctagcct 360
 gcagtctgtt ttctcggaa gaatcaccca gcaaggccct tggctctctc cgtggaggag 420
 cagattttgc agattcatg 439

<210> 10548
 <211> 429
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-E2

<400> 10548

tcgtgggtcg acatcagtcg cgtaaaatga gtcattctat ccatgtcggg tggccgtctg 60
 tctgggtcag gatcgcgacc cagtgggcaa cagcaggtct gttcatctgg tcccttggtg 120
 ctccccctct gttcccagac agggagttct agatcgacct ggtagctgc tagtgcatat 180
 ctgctagtgc atcatctgat tggagccacc tacgtattgt atcgtatcga acgtgttttg 240
 gctgtgatgg ctaagctgac tatctgtatt ctgggtctgta atattgtgta agcaaaccga 300
 tggcaaggag ccggtgtttg tgtgacgttg tcgagtctgg tctgcataat gtgtgaccta 360
 acgcattgtt gccagtattt caacagtga gatacgggtct ttggttggtat atatattgaa 420
 gttgatcaa 429

<210> 10549
 <211> 432
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-E5

<400> 10549

gggctgactc cgaccagtac accgtgcccc aggggaagcg cgccatcgag cttctctccg 60
 gcaaggaggg catcatctcg cagatggtgg agacgacccc tcagaaggcg tacacctga 120

cgttcacgct gggctcggca ggcgactcgt gccagctgcc aatggctgtc atggcattcg 180
 ccggcgacca ggcccagaac ttccactact ccccatggg caacgccacg agccaggccg 240
 tgaacgtgaa cttcacggcg cgcgccgaga ggacacgcgt tgcgctctac agcgtctact 300
 acaacacgag aagcgacgac cacagctcgc tctgggggcc ggtgatagac gacgtccgtg 360
 tctggggcctt gaatggggct gctgggttga aggcaagtat tgcgctgctt attgccatgg 420
 ctagtgtcat cg 432

<210> 10550
 <211> 291
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-F3

<400> 10550

cgcacaggctc cgagactcgc gggtcgacat catgggtgaa agttactcca agtactgctg 60
 gtatcagcag tacggacatt gatggggctg agtacaagtt gctggggagg tggaatgcac 120
 ttcaggtatg tcatgtgtac ctgcaagtga aaatgcccg gtttcagact gtgaatgttg 180
 ctggttcggc ttaacataca aactggctgt ccattgtatt ttaaacaatca gtacatcaca 240
 aattcactat gttatagtgc tcttcttaca tttgcagata tcaagttggt g 291

<210> 10551
 <211> 396
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-F6

<400> 10551

aggtagaacc aacacaacag aacaacaacc gttgtcgatg aagagtagtg tagatcagaa 60
 aaaatccaac ctgaagacac gagaacatag acgaacgatg aacagatgcg agcaaatcca 120
 ccgtagacag atctgccgga gacacgtcct cacacgcca ccggcgatgg aagcaccacc 180
 gaaacggggc ctagagggga gaaccttatt ccatttttag ggagccgcca ccgcctcgtc 240
 ttccttagca ggacagaaac cctaacaaaa ctcgaagaaa gatctaaaaa cggagccctc 300
 ccaccagcag gaaccatgat ccactctgtt cccatgactc tacggccgca ggagacgagg 360

cagaccaccg acgggaggca tagaaaccct agcttt

396

<210> 10552

<211> 431

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-F7

<400> 10552

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actgtaggga gctcctatcg tcttgtctat tattaagtgc tgtaagcgtc agttcgcgcc 120
gctgggcttg aactcctggc gtcgcacaag cgtaaccac tggaccaagc tcagtttggt 180
gattacttga ggaaaacaga gcgctttgac ctttcattcg gtacaaacac tagacatatg 240
ctagtattat atatccacca tagattattt gaataaagaa aacataaatt tgaaaaagca 300
ttcacatata ccatgaattg aacagaaaag tttgcaaaaa atggaaaaaa attcaagaac 360
cccaatagaa ttcaatcaaa tttgacaaga gttcaccaaa tttgagaaac tttcatctaa 420
gttttacaaa g 431

<210> 10553

<211> 221

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-H1

<400> 10553

acaggaccga gactcgcggg tcgacacaga accataaact tctgctcaat aacattttag 60
tactcacact ttttgetgat gacttcagat ctgaacctaa cggtaaaagt gccgacctta 120
aaatgaaccg ccaaatgcct aaaccaaact aagaacaact gggaagccag tccgttgcca 180
caaggggctt taaaccaatt tttaagacac cttcaacaac c 221

<210> 10554

<211> 322

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-H2

<400> 10554

gggtcgacac gattatcaac agaggtggcg aaccaaaccg tcgaagctcg ttgatggctc 60
ctacagtgtt cggaacgaat gaatcttctg tatgtatcta catatcacac caaaagggtta 120
ccgaataaga tgtgtgattg gctttcgccg tgtacccata ccagcatcga ttctgtatca 180
cttgtgtggt agtttgcaca aaacctgctt gaaaatgttt catggaaact tctttgcctg 240
gcgatgatgc ctgtattgaa taataaatga ttcagtgtca caaaaaacaa aaaaacaggg 300
ttaaaaaaaaa agcggccgct ct 322

<210> 10555

<211> 415

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-016-Q1-E1-H4

<400> 10555

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agaagcacta tcggaacggg gtagaacgtg ggaacatta ttctactaa gggatgtcgc 120
cgccgccaca cagtcccaac caaaacgctg aacctaacaa gaacgagaac aaggtcctc 180
ccgctggcgt gggggccgaga tcctccacac ctccacggcc tataggccat caaagatgtg 240
gcaaactggc ggcggcgccg atgggaggag aagtgttttt cttgtcaagg aaaaaatgg 300
cataaaagct ccaatttgac acatgtatct gcactactta atcattcata gttgttgggc 360
ctacaaataa gaggtanggc tgacattttg caaaactgcc ctatagtaac ccggg 415

<210> 10556

<211> 358

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-A1

<400> 10556

gtcgacatca cgggcttact ggagtccgtc ccagttttgg tcgtcgaacg atgacgatac 60
ccttcatact atgtgtaaata gccctggcg acgaacctgt ggcatgcaat ggccaaagat 120

tggcctagcc ctgatgtgga ttttgttcac aacaatggcc ctgaatggat gttctcctgc 180
tctagccact cacagatacg ccacgcgtgg tggtgctgac catgtgacgt acttggcacg 240
tccgtaacga gataactcgt cagaagaatc cgcacctac aaaggcctcc tgcagacttc 300
tccattgata tattaattcc ctgatataata aacggcaaca gcctatcgct gatattgt 358

<210> 10557
<211> 347
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-A2

<400> 10557

gggtcgacaa gattatcaac agaggtggga accaaactgt tgaagctcgt tgatggcttc 60
tacagtgttc ggcagcgagc ggagtcttct gtatgcatct acatatacaca ccaaaagtta 120
ccgaataaga tgtgtgtgat tggctttcgc cgtgtactcg taccagcatc gatcatgtat 180
cagttgtgtg gttagtttgc gccatacccg ctcgaaaatc tttgctgaaa cttcttcgcc 240
tggcgatgat gcctacattg aataataatg atccagtgtc agcaacgggtg taacgaaaac 300
agatgcatgt tcgtctaaat ctgtgggaaa tgttgcgtga taattgc 347

<210> 10558
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-A5

<400> 10558

ctcgcgggtc gacgcacaac gcaacattca gtacgtagga tccttctctt gggagccagg 60
gacaggtgga gaacgggaag gcgccatggg aaggggtgcg ggagcgctgc cggaaagagt 120
gggggatctt ccagacgagg atcgcggagg ccgacaaggc gtattacgag atgatgggag 180
tcacctctcc caacgtaaca tctgtccact aggcgcgtcg atacatacaca gctgttaatc 240
ctccctgtcc cccttttttg tcatctctag agcccttatt gtagtgagct taggtgaatg 300
gtgatgatat tgatgatacg tgtagagcat acacacatat cataccatat cagattaatt 360
ctgtta 366

<210> 10559
 <211> 443
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-017-Q1-E1-B1

 <400> 10559

 gggtcgaccc aagtccatat tctggtactt cctcaggaag ctcaagaagg tgaagaaggc 60
 caacggccag atgctcgcca tcaacgagat ctttgagaag aacccaccca ccatcaagaa 120
 ctacggcatc tggctgcgct accagagcag gaccggttac cacaacatgt acaaggagta 180
 ccgcgacacg accctgaacg gcggcgtgga gcagatgtac acggagatgg cgtcgcggca 240
 ccacgtgcgt gccccctgca tccagatcat caagactgcg acggtggact tcaagctgtg 300
 caagagggac aacacgaagc agttccacaa ctccaagatc aagttcccgc tgggtgtacca 360
 gaaggtgcgc ccacccaccc gcaagctcaa gaccacctac aaggcgacga ggcccaacct 420
 gttcatgtga tcgggtccct act 443

<210> 10560
 <211> 441
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-017-Q1-E1-B3

 <400> 10560

 gtcgacaagg ccatacctcgc cctcaagacg cagcgccgca agctcgcgca gttccagcag 60
 cagcttgaga aggtgatcga agcagaaaag gaagctgcac gccagttggt tcagcaaaag 120
 aagagagaca gagctttgat tgcactgaag aagaagaaat cccaggaaga gtcctgaaa 180
 caagttgata catggcaa at gaatgtcgaa cagcagctgg cagatattga actagcaagc 240
 aagcaaaaag ctgtattgga aagcctaaag actggaaatg ctgcccttaa gtctatacag 300
 agtgagatta acatcgacga tgtccaaaag ttaatggatg acacagctga gaccaaggct 360
 tatcaggatg aaataaatgc cgctctgggt gaacaactat ctgctgagga ttaggaggct 420
 gtcatgggtg aatttgacaa c 441

<210> 10561

<211> 434
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-017-Q1-E1-B6

 <400> 10561

 actcgcgggt cgacgcgacg cgataaagtg tgcctcgcga tgctcgtggg ggcagagctc 60
 gacggcctca ccaacctgca gccccgcggc ggctgcgacg accccagcta cccttactac 120
 ttcaagtgca agttatgttc gagggatgga tcagttgtga tgattcctgg gcaggggaaca 180
 ccactaactg ctgagcagag ccagaaagga gagatgactt gtttgatggg ctttgaatgc 240
 agaggctatg aacctattga gttcgcctttt ggtaatggct ggaaggctga atctgtacat 300
 gggacaccat ttgacattga tctttctgaa ggagagtttg atgagtatga tgagaaggga 360
 gagtgccttg tcgctctatc caagctgcag tcaacattca gagtgggtga aaagcagggg 420
 tttcatgggg aaga 434

<210> 10562
 <211> 441
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-017-Q1-E1-C2

 <400> 10562

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 cccaacgatg agccgacacg tatttctctcc agccaatgat gattttacac gtggaaaatc 120
 cccattggtc ggggctgtta acggtttctc ggatccaaaa cccgacccga tagcttaacg 180
 acgttccatt acggtggatg ccacgtgtcg gtcacccttg acgaaatcac ttttgtgaca 240
 cgcgatttat cgtcatggaa gtgcacactt ctgtgatgat aattttggta aagtcatgga 300
 acacttctac gatagcacag gtatgactat cttgattctg tcataaaatc gtcatggatg 360
 tacatgcatg acanaaaaaac gcgacctact gtgacaaaca cgtatcatca cggaagtgtg 420
 attttttgta ntgattgtcc c 441

<210> 10563
 <211> 446

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-017-Q1-E1-C3

 <400> 10563

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 caatcggttg ttacagcagt atgttacttt cctatgatat catgatggct tgcttatatt 120
 actctcaaca ttactgaaa aaatattcat gctcataaca tgcttttctt aagattgact 180
 ccaacttgat atgatgttgt aggcctcttg gtgcccctac ccttcctaata cccagaacct 240
 ttcaaagtaa agtggcatgg cagttgcagg tggttactgg ctcgatcaga caacggcgaa 300
 cgattgatga tcgttctcac gtaccggacg tgttgtttcg cggaatacaa tcatagtcac 360
 tgcaaagggtc tttagagcagg atcctagctt ctttgggcct tcaagaattt ttgactggag 420
 gctggtaagt agccttggtg cagcgt 446

<210> 10564
 <211> 400
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-017-Q1-E1-C7

 <400> 10564

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 gccttctact ttggagcaag attcgggttt gacaaagaat ccaggaagcg gcttttttagc 120
 atgataaaca acctccccac catatatgag gttgtcaccg gaactgcgaa gaagcagggtc 180
 aaagaaaaac accccaaaag cagcagcaag ataaataaat ctggcactaa gccatctcgc 240
 cagccagaac ctaactcaag gggccaaag atgccaccac ctccgaagga tgaggacgac 300
 agtggaggcg aggaagaaga gggagaagaa catgaaaagg cattatgtgg tgcgtgtaac 360
 gataactatg gacaggatga attctggatc tgccgtgatg 400

<210> 10565
 <211> 435
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-017-Q1-E1-D4

<400> 10565

ggtcgacgcc atccacaaaa tacataccta taaaaacggt tttgagaaca ttttagaagg 60

ttcctatcca gtttttacca ttttggggat cctcgtatat ggtttttgac tgttttttca 120

ttattttttc ctttttttct ttttagttta tattatgtta atttttttcc aatatacaaa 180

attttcaa at tttcaaaagt tatttggaa tgtgaaacat tgttaatgat ttccaaaatg 240

tttacaagtt tcaaaaattg ttttttggaa ttttaaaaag ttcttatttt tttcaaaaaa 300

cgaatagaac ttgtaagaaa atttctttta gaaaaaaaga acaaaaccta ttcccaattt 360

taaaaaagtg tttgaaattt tcaaaaactg ttgtgggttt ctataaattt attggaagtt 420

taaaaagtac aaaat 435

<210> 10566

<211> 342

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-E1

<400> 10566

ggtcgacaat tgaattcaaa cccaatacag ccaatgatcc ccatatgaga aagcccgata 60

ttaccaaggc caagcaactg ctaggttggg agccaaagggt atctctgaag gaaggccttc 120

ccttgatggt gacagatttc cgcaaaagga tcttgatga gtaatcaagg caacagtgag 180

atgaatctat ttggttctga atgctgcaa tataggcaaa cgcgcttcac caactggatc 240

cgttcagtac aattctgtgt ttgtataacg acctgtaga atcatttaaa tttgttttcg 300

tcttggtgag actggacaga agtaaccaat ggttttttgt cc 342

<210> 10567

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-E6

<400> 10567

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agctgcaagg atgaggggtg ctgcaaacga gaaggcggag gctgagaaga ttgtccagat 120

caagcgtgcc gaggggtgaag cagaggccaa gtacctgtct ggcttgggta tcgcccgcc 180
gcgccaggcc attgtggatg gcctgagga cagcgtcctg ggcttctcag tcaatgcgcc 240
tggcaccact gcaaaggacg tgatggacat ggtgctgac acccagtact ttgacactat 300
gaaagaggtt ggcgctcct ccaagtcctc ggcggtgttc atcccccatg gccctggcgc 360
ggtgcgcgac atcgccacgc agatccgcga ccgtcttcgt cagggggccag tctgcctctg 420
acaac 425

<210> 10568
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-F2

<400> 10568

attcgagggc cgactctcac agaaaacgat agccatcatc tcatcgaaac atcggaagac 60
cttagcctct atcaagtggc atcagatttc caggttgac ggtgagattt tacagttttt 120
cgtatattag atcgagtctg ttcgtcatc ctacaggcaa cgataaagcc acacaaaaga 180
ttacggtag tgcatcatat ccgaaccaat ctgagccttt gcataatctt tttagggttt 240
ttgcattgtt gaatttgccg ttgcatcgtc gtgtcaagtt gatggtctta gagtcgagtc 300
ttttagagtt tcgagttctg gtcataaatt gtcacgccgc cgccgcacca tcatcatcgc 360
ccatctacca cttttgcata tccgccaacg ctctgaatcc atatctatat accaccacga 420
atccgtattc atatatcacc a 441

<210> 10569
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-F3

<400> 10569

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aaggtcgcgg atctgcagga ggccatccac gccaagacta agaagtatta tcctgctagg 120
caacggctca ccctccctgc acagcctgga aaatctggaa agccagttgt cctcaatcaa 180

aaggccagcc tatcggaata ctgcgagaag ggttccgggt ccttgacagt ggtcttcaaa 240
gatttaggcc cgcaggtcta ctacagcagc ctcttcttct ggggaatacgt cggccctctt 300
atcatctacc ccatcttcta ttacctgccc gtctacagat actttggata tgagggggag 360
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aggatcatgg agaccttctt cgt 443

<210> 10570
<211> 385
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-G1

<400> 10570

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ctcgatccag gggtatatat cataaagggc ttcgacaagg ggtttgattc gttctttgag 120
caaaaagata aggtcgggaat accggagttc tttctttgct tccaagaaca tagattcctt 180
cttcaacca ggtcatgacc gagggcgggt atctcactcg catatctaga gccagcatc 240
tctctgaac gacaccttct gcagactcta ctggtggtat ttcccgaggc gagggccaat 300
atgtgcattc atatcgggtca ggaaacgaca atgactcttc ttctttccgg gaagctatgg 360
gcacctcaca attcttatac gacat 385

<210> 10571
<211> 316
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-G3

<400> 10571

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attcttggtc ctgggatctg tcgatctgga aaacattatt gtcgtcccat ttagttaccc 180
ctcttacaga aatgctgctg gttttgtttt tgagtgatgc cctgggtcttg aatgtctgct 240
acctttaaat agttgaactg ctgagcgggt tgtaatggcg aaacatctat catgtggagt 300

aaaatcagtc tttgat

316

<210> 10572

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-G4

<400> 10572

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tgtagtactc ctacaaacca taccgcccga cgcacatca gttttcttca agaggacgag 120

ggagaagcgg atttgtagtg gaggcgcttt aaaaaaagga tttgtagtgg aggccctac 180

cctaggggtgc cctaggtagc taccgcacac atcattgggtt ttcttttttc tttataactct 240

tgccgcctag agtgaaatga tgggtgcttc atccgtccaa cttaatgcgg gaaaggtggg 300

gctttgtgat ttgacccctc atcgctcatt tactactatt gcggcgctac gaccgggggtg 360

cctccaagtc caaccgctgc tccgaactat aatttggtgc atcacgcgtg gaacaagatg 420

gtggatgagc cacatg 436

<210> 10573

<211> 380

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E1-G7

<400> 10573

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tgccgaatgg caggaagccg ctggatcatca tgtatcgaca caaaccatta atgagaagaa 120

caaactaccg gatgcaaata tcaagcaagc cgaagaactg aaggatttaa gagcccaact 180

atcggtatgct ttcaaggaga acaggaagct gagaggcagc atattcagta tgctctttaa 240

cctgactgtc acatggtctc ctgtttgaaa atttgacaag tttacttctg taggtgtgct 300

aatcagacac cccgaaggag aagtgtctgg attccaaggc gaccagctac aagagctatc 360

aaaggtgcac gaacaagcac 380

<210> 10574
 <211> 431
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-017-Q1-E1-H1

 <400> 10574

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 tctgtgagta gagagaagca tgatgcatct gctgccaatg ccagcgccac ctcttcgaaa 120
 cccaccacct cggccaaggc tccagaacca ccaaagggtt ccaacaagtc ccggaagaaa 180
 aagtcgaggt cttaggcgac aaagttgtta tgtcacaaat taacagtata caaaggacac 240
 tgtccatttt agtatcttga cttgattttt ttgtgttatc tgcattggat tggcctgcgc 300
 tgtgccttta gaaccatggt tatggcgact tgagatccta gacttggtgc aaatTTTTgt 360
 taaagggtgc tgacttacct ggtttgaaat tcccttcctt tcaatacaat aataaatttc 420
 cttgcaattt t 431

<210> 10575
 <211> 453
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-017-Q1-E1-H2

 <400> 10575

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 gatattctatg atcggcagaa caactccacc cactgagttgc atgcctttga gggatttga 180
 gtgactgtcg agatggcagt acaggagggt gcctatgttg ctatcaccag cctccgtaga 240
 gggcatccac gcttgaggga gactgggttc agatacttcc cgtaccacc agctggggat 300
 gatactangc ggtacactgc tgtgtgtacc ccttacgtga gccgccggta cgacccttag 360
 tatatgggtc gatacaatga ggttctggat cgcactgttc gagctttgac tgttgagctg 420
 tacgccacgc gtgcacgcca ctacgacact ctg 453

<210> 10576

<211> 418
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-017-Q1-E1-H3

 <400> 10576

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 gcagcgcccg cagccccaga gaggcagaga gagacggagc tccaaccaag gaataatagt 120
 tcaaacagca acgtgacatc agcagggtcc tccagcttaa cctcttcaga gaatggacct 180
 gaatattcaa gcccggtagc acaatgatga gtggatccct agcttttagc tgaaagcttt 240
 gtagctgcaa cggtttgagc ctaggagatt gaagtgcctt gcggtttttg tacgctcgct 300
 tgccttccc aacctgatgt atgaaaatta tgtggaagag tccacagctg ttatataagg 360
 aattttgggg ctgggaatcg tttgtaagaa acattgtaga ataacttctg gttcactt 418

<210> 10577
 <211> 397
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-017-Q1-E2-A9

 <400> 10577

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 ccgccgcttc cttgtgttgt tcatcaaccc aggtcaatgg gtttgggtctt aggcctgaaa 180
 gggtgcttct ttaccaaccc acttcctttt cttctctcag aaggagaact catggaattg 240
 tcaaggcctc atctcgggtt gatagggttt cgaaaagtga tatcattgtt tctccctcta 300
 ttctctcggc taatttcgcc aaattaggcg agcaggtaaa agcagtggag ttggcaagtt 360
 gtgattggat tcatattgat gtcattggac gtcgttt 397

<210> 10578
 <211> 424
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-017-Q1-E2-B1

<400> 10578

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atctggctgc gctaccagag caggaccggt taccacaaca tgtacaagga gtaccgcgac 180
acgaccctga acggcgggcgt ggagcagatg tacacggaga tggcgctcgcg gcaccacgtg 240
cgtgccccct gcatccagat catcaagact gcgacggtag acttcaagct gtgcaagagg 300
gacaacacga agcagttcca caactccaag atcaagttcc cgctggtgta ccagaagggtg 360
cgcccaccca cccgcaagct caagaccacc tacaaggcga cgaggcccaa cctgttcatg 420
tgat 424

<210> 10579

<211> 441

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-B12

<400> 10579

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gggacacctt tgcctctatc aagtggtagc agatttctag gttgctcggg gagattttac 120
agtttttcgt agattagatc gagtctgttc ttcataccta cagtccacga aaaagccaca 180
aaaaaaatta gggtagttc atcatatccg aaccaatctg agcctttgca taatcttttt 240
agggtttttg cttggttgaa tttgcgggtg catcgctcgtg tcaacttgct agtcttagag 300
tctagtcttt tagagtttcg agttttggtc ataagttgtc acgccgctgc cgcaccatca 360
tcatcgcccg tccaccactt ttgcttatcc gccagcgtc tgaatccata tccatatacc 420
accaccaatc cgtatccata t 441

<210> 10580

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-B2

<400> 10580

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ccgcgaggggt tggcaactct gcgtaacga gggcgaagca ccggctcttc gaggatttgc 120
aggtgctgac acattggacc aacaccatga taatggcaac tctgcctcgt taatgtcggc 180
caccaacgat gataaggcca aaccgccccca catggccatt gacctcacct ccaacgggag 240
gaatagatta ggttttcagt tgtttttagg gttttctttg ttatgtataa attacttcga 300
aatgattgaa aaatcgggtgt ccaccttatt tgattactct ggttggaatg gctccgcccc 360
gctggctatc cacaacatg tccgacaatt tttttgaagg cgtacttatt tgtattcaag 420
caagcggcaa accaatacat gtacaat 447

<210> 10581
<211> 452
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-017-Q1-E2-B3
<400> 10581

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ccagcagcag cttgagaagg tgatcgaagc agaaaaggaa gctgcacgcc agttgggtca 120
gcaaaagaag agagacagag ctttgattgc actgaagaag aagaaatccc aggaagagct 180
cctgaaacaa gttgatacat ggcaaatgaa tgtcgaacag cagctggcag atattgaact 240
agcaagcaag caaaaagctg tattggaaag cctaaagact ggaaatgctg cccttaagtc 300
tatacagagt gagattaaca tcgacgatgt ccaaaagtta atggatgaca cagctgagac 360
caaggcttat caggatgaaa taaatgccgc tctgggtgaa caactatctg ctgaggatga 420
ggaggctgtc atgggtgaat ttgacaactt gg 452

<210> 10582
<211> 393
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-017-Q1-E2-B9
<400> 10582

ggagaagaga tcgagagaag aatagtttga tcactctgtg agaaaaataa tggctgctcc 60

agtgatgcta tcttcggtga cattgaaacc agctgggttc acggtggaga agacggcggc 120
 tagaggatta ccgtcgctca caagagctcg tccctccttc aaaattgtcg ccagtggcgt 180
 caagaagatc aagaccgaca agcccttcgg aattaacggc agcatggact tgagggacgg 240
 cgtcgacgcc tccggcagaa agggcaacgg atacgggtgt tacaagtacg tcgacaagta 300
 tggagctaac gtcgatggat acagtcctat ttacaacgag aacgagtggc cagcgagtgg 360
 tgacgtgtac aaaggaggaa tcaccggatt ggc 393

<210> 10583
 <211> 301
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-017-Q1-E2-C12

<400> 10583
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 gaggtataat ggctgcttca gtgatgctat cttcggtgac attgagacca gctgggtttca 120
 cagtggataa gacggcggt agaggattac cgtcgctcaa cacagctcgt cgctccttca 180
 agattgtcgc cagtggcgtc aagaagatca agaccgacaa gcccttcgga attaacggca 240
 gcatggactt gaaggaccgc gtcgacgcct ccggcagAAC aggcaacgga taccgtgttt 300
 a 301

<210> 10584
 <211> 445
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-017-Q1-E2-C2

<400> 10584
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 ttggtcgggg ctgttaacgg tttatcggat ccaaaacccg acccgatagc ttaacgacgt 180
 tccattacgg tggatgccac gtgtcggtea cccttgacga aatcactttt gtgacacgcg 240
 atttatcgtc atggaagtgc acacttctgt gatgataatt ttggtaaagt catggaacac 300

ttctacgata gcacaggtat gactatcttg attctgtcat aaaatcgtca tggatgtaca 360
 tgcacgacaa aaaaacgcga cctactgtga caaacacgta tcatcacgga agtgtatttt 420
 tttgtagtga ttgtcccaaa taaaa 445

<210> 10585
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-017-Q1-E2-C3
 <400> 10585

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 aatcggctgt tacagcagta tgttactttc ctatgatata atgatggctt gcttatatta 120
 ctctcaacat ttactgaaaa aatattcatg ctcataacat gcttttctta agattgactc 180
 caacttgata tgatgttgta ggcctcttgg tgcccctacc ctccctaata ccagaacctt 240
 tcaaagtaaa gtggcatggc agttgcaggt ggttactggc tcgatcagac aacggcgaac 300
 gattgatgat cgttctcacg taccggacgt gttgtttcgc ggaatacaat catagtcact 360
 gcaaaggtct ttgagcagga tcctagcttc tttgggcctt caggaatttt tgactggagg 420
 ctggtaagta gccttggtac acgctct 447

<210> 10586
 <211> 406
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-017-Q1-E2-C7
 <400> 10586

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 atgataaaca acctccccac catatatgag gttgtcaccg gaactgcgaa gaatcaggtc 180
 aaagaaaaac accccaaaag cagcagcacg ataaataaat ctggcactaa gccatctcgc 240
 cagccagaac ctaactcaag ggggtccaaag atgccatcac ctccgaagga tgaggacgac 300
 agtggaggcg aggaagaaga gggagaagaa catgataacg cattatgtgg tgcgtgtaac 360

gataactatg gacaggatga attctggatc tgctgtgatg cttgtg

406

<210> 10587

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-C9

<400> 10587

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ccagaagtgt atccgaaggt agagacttgg atcgagaatg tgggtgttga agaaggtaat 180
gcaacaatac ttacactctt tgtctgtctc atcacaattc tctatctccg ggaaagacaa 240
cgtagacaag tcgtcgttgt tgccgatcca gtggctgctg acgtggcaca accgctcgac 300
gctgatgtgg cgcaacacct cgctgcgttc ccacggtaat caattgataa tcgttttcgt 360
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<210> 10588

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-D3

<400> 10588

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cgatggtgaa gcaaaggcca agtacctgtc aggctgggt aacgcacgcc agcgccaggc 180
cattgtggat ggccggacgg acagcgtcct gcgcttctca gtcaatgtgc ctggcaccac 240
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tagcgcgctc accaagtcct cggctgggt catccccat ggccctggcg ccgtgctcga 360
catctccacg cagatccgcg atcgtcttct tcatgggcag tctgcctc 408

<210> 10589

<211> 397

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-D4

<400> 10589

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tccagttttt accatttttg ggatcctcgt atatggggtt tgactgtttt ttcattaatt 120

tttccctttt gtccttttag tttatattat gttaattttt ttccaatata caaaattttc 180

aaattttcaa aagttaattg gaattgtgaa acattgttaa tgattttcaa aatgtttaca 240

agttttcaaaa attgggtttt ggaattttta aaagttccta attttttcaa aaaatgaata 300

gaacttgta gaaaatttct tttaaaaaa aagaacataa cctattccca attttaaaaa 360

agtgtttgaa attttcaaaa actgttgtgg gtttcca 397

<210> 10590

<211> 405

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-D9

<400> 10590

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aagctatgaa ggtttttaat cttgaccgtg gaaacactct ctctgttttc ctcttctcgg 120

gtgtcaccaa ctccaaggag ctcttgaatt caatgcttga cggaagtctg aagctggagg 180

tctcatttct caatgcatca cttattccag acatttttcc tctattggct gctgctcaga 240

aagcaattat ctccaaatca cgcgattcct tatcaaccag aactcttcat tctgagcttg 300

tctacaatta ctcaggatct aagcacatta cagaatcatt gaaacgatgt gggatttctg 360

agaacactac ttacattcta gctgcccggg tcaatgcttc tcccg 405

<210> 10591

<211> 390

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-F11

<400> 10591

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 ttaggaagat attcaaagca gtgcaatctt tggtgcccac ctgccataac acatttcctg 180
 aggttctcat atttcctttc atgtcagaac aatatccaag aaatcgtaca atattcttgt 240
 gcttcgcctt catgagacac tcgatctctc ctagaaattt ttcctcgtgc atgtacgtat 300
 tgatatgtct ctctagaaa attttctctt ttaccgaaaa agggtttccc cccgctttgt 360
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<210> 10592
 <211> 435
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-F12

<400> 10592

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 gatggagtct gttcttcata gctacagtct accacgaagc cacaaaaaaa ttatgggtgag 180
 ttcatcacat ccgagccagt ctgagccagt acataatctc tttagggttt tgcattgtag 240
 aatttgcggt tgcacgtcgc tgtctagttg ttggtcttag tgtctagtcc tttagagttt 300
 caagttatgt tcacaagtag tcacgccgcc gccgcatcat catcatcagc gctgccatag 360
 accagcatca acatcactgc tgccatatac catcacgctc atcacgctg cgatatagca 420
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<210> 10593
 <211> 459
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-017-Q1-E2-F3

<400> 10593

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gtattatcct gctaggcaac ggctcaccct ccctgcacag cctggaaaat ctggaaagcc 180
 agttgtcctc aatcaaaagg ccagcctatc ggaatactgc gagaagggtt ccgggtccct 240
 gacagtggtc ttcaaagatt taggcccgc ggtctactac agcacgctct tcttctggga 300
 atacgtcggc cctcttatca tctaccccat cttctattac ctgcccgtct acagatactt 360
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<210> 10594
 <211> 375
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-017-Q1-E2-F9

<400> 10594

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 gacaataact agaaagcagc aacctttgtc tttcaacacc gtgtgttttg ccgcagacga 240
 gccctccgaa atcagtgtcg atgctagaat ccgtagtgag gttctgtctc cgttcagatt 300
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 cacttctagg ctcat 375

<210> 10595
 <211> 450
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-H2

<400> 10595

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 gcagaacaac tccaccacg agttgcatgc ctttgagggt attggagtga ctgtcgagat 180

ggcagtacag gaggttgcct atgttgctat caccagcctc cgtagagggc atccacgctt 240
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cactgctgtg tgtacccctt acgtgagccg ccggtacgac ccttagtata tggttcgata 360
caatgaggtt ctggatcgca ctgttcgagc tttgactggt gagctgtacg ccacgcgtgc 420
acgccactac gacactctgg agcagatgcg 450

<210> 10596
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-017-Q1-E2-H3

<400> 10596

ttcccggggc cacaaaatth gttccgacaa ttatgaacat tctgaagaga ctactgatg 60
agggggcagc gcccgagcc ccagagaggc agagagagac ggagctccaa ccaaggaata 120
atagttcaaa cagcaacgtg acatcagcag gttcctccag cttaacctct tcagagaatg 180
gacctgaata ttcaagcccg gtagcacaat gatgagtga tccctagctt ttagctgaaa 240
gctttgtagc tgcaacggtt tgagcctagg agattgaagt gccttgcggt ttttgtacgc 300
tcgcttgccc ttcccaacct gatgtatgaa aattatgtgg aagagtccac agctgttata 360
taagggattt tggggctggg aatcgtttgt aagaaacatt gtagaataac ttctgtttca 420
cttttatttt tgtaatatct t 441

<210> 10597
<211> 154
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-A10

<400> 10597

ccgggtcgac agcgaagacg agggctcggc atcgatcaatg aaaatatgac acaccgcaca 60
tgtaacattt actgtacgat tgaactgtgc tttcttagac ggagatcaat ctttgtacag 120
tgatgttaga atatcacttg aagtgaacat ctca 154

<210> 10598

<211> 417
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-A3

<400> 10598

ggtcgacgct cgtcatgaaa ggtggaagca aatgcaagtt cataacaaaa gatcgттаac 60
 aacaatacca acttgccggac gacaaggtag tacaactacc aataccaaac tactcctggc 120
 cctagtgttc gtcgggtaga aaatcttgca gaggaccagt tcccgtect tctcttgctc 180
 cagggtccccg atgtggtact ggtgtatcac ccagttggtc ctctgctggt cgaagttctt 240
 gttggtgtgc agcgccagaa ccttttttgc tgcccgtctg ccggccgttg accatcacag 300
 gcaaggtatt gccggtcttg tgccacatcg cgtgcgtgcc gcactccgac tgtatctcgc 360
 gacacgtcca cgtgcccctt ttgatcgccc tggaagtgcg ttggaagaaa tgcttcc 417

<210> 10599
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-A5

<400> 10599

actcgcgggg cgacagggaa ccctatactg agtctcacga ttttgttgtc atcgcacgca 60
 acataagatg gcaccgcatt tgattcattc ctttccggaa agatatatat agtttaagag 120
 atgcaacaag gagcggctag cactataaac ttaagatatg atgatatata tggcacctca 180
 ccttggtggt ttcgccaaga acaaagctgt gaggctggcc ggtgaccatg gttgctactt 240
 ccgcccacaa cacacacttt ccgtcctgaa cccatccaag atttttctcc tctcctgct 300
 gctgctgctg ctgcgctttt gacagcaagt cgctcacgg cggcaaatcc aggtgagctt 360
 gaaccatgct ttcttctaag tgcggatttc gtttcttctg ctgcgttcca gcccctgctg 420
 cctttgtttt tccgtgtgcc gtt 443

<210> 10600
 <211> 402
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-018-Q1-E1-B1

<400> 10600

gtcgcacgaca ttgtcaatct ggggcccgtg tttctacaca atatgttccc ctttgagagg 60
ttcatggggag tcctaaagaa atatgtccgt aaccccgcta ggccagaagg aagcatctcc 120
atggggccatc aaacagagga tgtcattggg ttttgtgttg acttcattcc tgtccttaag 180
aagatagggtc tccctaaatc gcggaatgag gggagactga ctggaaaagg catgctanga 240
gcggaactcaa taatatgcag ggacgggcat tcttgggtctc aagcacacta cacagttcta 300
cagaactcta ccttgggtgac accgtatgtc gatgaacata agaacagtct gtgggtccaaa 360
cacccggagc agtgcgacga ctggattaca tgtgaacaca tc 402

<210> 10601
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-B10

<400> 10601

tctcccgagt cgtccgcctg aatgagtcag tatttgtaat agagatggga cttctgaagc 60
tggaaaatgc ctacaagttt cccaacctgc gctgccgggg gtgggcgtgc agaaccaagc 120
ttccatccaa cacagctttg cgagggtttg gctttcccca ggcagggtg atcaccgaag 180
cctgtatcac agaagtggca gccaaatgtg ggttgcccc tgagaagggtc cggatgatac 240
acatgtacaa ggaaattgat caaacaccct acaaacagga gattaatacc aagaacctga 300
cccagtgttg gaaagaatgc atggccacgt cttcctacac cctaaggaaa gcagcgggtgg 360
agaaattcaa ctcggagaat tactggaaga agaagggggt ggcaatgggtc cccctgaag 419

<210> 10602
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-B11

<400> 10602

actcgcgggt cgacgcaacc ctggaacatt gggcacagat caggcagctg atgagatcaa 60

aagcattgct gccattcttt gacagtgttt atcaaggatt tgcaagtga agccttgaca 120
aagatgcca atcagtgcgc atgttcgtcg ctgatggagg tgaattgctc atggctcaaa 180
gctataccaa gaacatggga ttgtatggag agcgtgttgg tgctttaagc atcgtttgtg 240
ggagtgtga tatagctgtt aagggtgaaa gtcaacttaa gcttgtaatt aggcctatgt 300
attcgaaccc tctcttcat ggtgcttcta tcgtggctac cataactaag gacagtgcga 360
tgttcgacga atggactctg gagctgaagg ccatggctga taggataatt agcatgaggg 420
agcagctttt taa 433

<210> 10603
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-B7

<400> 10603

acacatggag gctgtcatgc tcgctgcact cagtcacctt gtgactgtgt ggatcactgg 60
gcggtgacta gctgcaattc acgaaggcat aacattggca ctgagttgga cagaattgga 120
ccttgtggta gagagcgatt gtgcggatgc gctacatttg atctctgctg tggggaaaga 180
tcggtcagct cacactcata aagtcatgga gattagatcc ctgctagctc aagaaagaag 240
gatccagtta cagaagatta agcctagtgt aaatctcgct agccacactc tcgcccattt 300
gggacgtact caacagcgga ctgctgttta gctgcgtaac cctcccga 348

<210> 10604
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-C11

<400> 10604

gcacaggact aggactcgcg ggtcgacacc atcccataac atgcgaccta ctatttcggt 60
gctctgcgtg ctcggtgtga cgacgacgag gtgcgcaagt gggtagacct taccggtatc 120
gagaacattg gcaagaagct tgtgaactcg cgggacggac cagtgcacct tgagcagcca 180
aagatgacag tcgagaagct gctagagtac gggcacatgc tcgtccagga gcaggacaat 240

gtcaagcgtg tgcagcttgc tgacacctac atgagccagg cagctctggg tgatgctaac 300
caggatgcga tgaagactgg ttccttctac ggtagaaca ttctccatac acaccacca 360
tctcttgctg cataggagga ggtaaagggg cacagcaagg tactttgcct gtgccggcag 420
gatgcaccga ccagactgcc aag 443

<210> 10605
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-C12

<400> 10605

gaggcgtatg acgccatcgc cgtcgaggct tcgcatccgc agccgccagc ggcaactcaag 60
attgacgggg tgctcaaggc gctgagcctg gcgtcccaa gcccaagagg tggcttctcg 120
gataagccta tgtacaccga gaagcccacc aagtacgccg gcagcccgat gagcgggtggc 180
gcaccgcgct tcagccacca gcctcgctat gttgggatgt caagcttcaa gaatcgagca 240
aatcctgcgc ctgcagtgat gcattgctct ggctgccgcc gccgtctcat ctttcaagtc 300
ttcttctacg agtagtaagt aatggtgtcc gtttgtatat gatattaagt acgtacaaat 360
gaaatgacct aagaaaaagg caacaaaatg c 391

<210> 10606
<211> 444
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-018-Q1-E1-C4

<400> 10606

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aagacaacct gacctgatac tagctcactt aaagaaggga gcttctgcct gtcacatacg 120
cacacatact atctcttgta cagtgtatat atatcacaat atgtaaaatg gtagcagtga 180
gttggtgaga catccagcac gtttgtttct tgatgaagca cttgtcgagg cgcttcaagc 240
cttgttggca atgttggttg agagccagtc aagtcctctg tacaaccctt cgccagacgt 300

cgcacaaagtg ctctgaatgt accagtgccg ctggcgcaag gaggcagac caagcttgct 360
 ggtgatttca gcagcattca tggcattagg aagatcttgt ttgtttgcaa atacaagcaa 420
 cacagcatca cgcagctcat cctc 444

<210> 10607
 <211> 444
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-018-Q1-E1-D2
 <400> 10607

ttcaagggctc gacagagttc tacaacttca actctcagcg gccgagcacc cgctattggg 60
 tatttggccc cgtcaaattt gaggtgttct tgcctgacct taacacttgg tttctgtatg 120
 atacatcagt gctctttgag gcaaaagttt ctcgaccaca catgtttata gatggagcat 180
 tgtatgtgca cacaggtttg catgacattc tggccttgga ggaaactagt tctggcattc 240
 cgccgtctct tccgactatt aagttgccgc atgaagatgg tgcctttatg ggtaggtttg 300
 gccaatgttg ctttggccaa ttttcggggg gcttgacta tgcattgcca gaggaggatg 360
 ctcgtacgat tcttgtttgg agtcttgatg ttgatgagcc ttatgagtgg agcctcaagt 420
 aacgcctcaa tatgagccaa gcat 444

<210> 10608
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-018-Q1-E1-D3
 <400> 10608

cacgggtcga cgagattgtc aacctgggtc ccgtatatct acacaatatg ttcccccttg 60
 agaggttcat gggagtccta aagaaatatg tccgtaatcg cgctaggcca gaaggaagca 120
 tctccatggg ccatcaaaca gaggatgtta tccgggtttg tgttgacttc attcctggcc 180
 ttaacaagat atgtctccct aaatcgcggt atgaggggag actgactgga aaaggcactc 240
 ttggaagaga ctcaataata tgcagggacg gatattcttg gtctcaagca cactacatag 300
 ttctacagaa ctctaccttg gtgaccccgat atgtcgatga acacaagaac agtctgtgct 360

ccaaacaccc ggagcagtgc gacgactgga ttacatgtga acacatcagg actttcagca 420
gttggttga aacacgtctc 440

<210> 10609
<211> 446
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-018-Q1-E1-D4

<400> 10609

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acaccattga ggtggagatc catgacggcc cttacaacgt catcaagaat tggaactaca 120
ccggcggtgtt ggaagcattc cataatggcg agggcaagtg ctatcaggcc aagggtccgaa 180
cagaggagga actgaagaag gcaattgagg catccctagg acccaacaag gacagcctgt 240
gctttataga ggtaattgtg cacaaggatg aactagtaa agagcttctt gagtgggggtt 300
ctanggtttc cgccggaat agccgcccac caaatcccca gtgacacatc aggtctccac 360
aagatcctca tccagcttaa tgatgtcatg tggaagttct gaatagatgt tactgttctc 420
tgaataaatc atccatttga gtccat 446

<210> 10610
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-E1

<400> 10610

actcacgggt cgacgtaca ccctaaaatg aggcattcta ggtatctacg atgagcccat 60
gactcctggc cagtgaattt tggctgtgga gaggctcggc gactacctgg tcgagcaggg 120
tttctaagcc cgccctgata tgctgttatt ttggctgtct gggactaagt ttgctctact 180
gtgggctttg catccatctg cttggcgtac cgcgtgatat atgcagtga taatttttagc 240
ttgggggtttg tcggttggtg atgtgtcgaa ggggaaaaat ggatttacta tgttttcttt 300
ttaatgtttg gcatcgctc gtatcaaact cagccgctct ttcgctgagt aatgtacatt 360
tgcttggtca tggtaacttg tgggttctgc tgctgttcta ttgaaagatg attgcaattt 420

tagct

425

<210> 10611
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-E2

<400> 10611

ggtcgacgct gtcgcgcgcg tccggtggtc tgcagtacat gggacatact acccgcgatt 60
gggtaaagaa gcaagcacgt aatagagcat atctcttgag cattctgtcg gtaattattc 120
cctgtttgat gagatgagtt tgcatttgtt ctaaaaatgt tggaaacaga agtttgccag 180
agaagagtct gaagatgatg tcaagaaact tctggatttc tttaagaaaa tgcagaagat 240
aaaccagag ttcttctatg attaagaagt tgatgcagat aaccgtgtaa gaaatgtctt 300
ttgggtgaac acaagttgca aaggatcgta tgaagatttt ggagactgcg ttacatttga 360
cacgatgtat aaaactaaca aattccacat gccgctggga gtctttgtgg ggggtgaacca 420
tcattctatag agcaccatat ttg 443

<210> 10612
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-E6

<400> 10612

acgctaaacc ctaaattgag tcctattact acaccaggc cattgaggcg gggccggcca 60
ccgcggaact ctacgccgac cgagcccagg cgcacatcaa gctgggcagt tacactgagg 120
ctgtatctga tgccaacaaa gcaattgaac ttgatccttc gatgcataaa gcataccttc 180
ggaagggctc tgcttgcatt aagctggagg aataccaaac tgcaaaggct gctcttgaag 240
tgggttcttc atatgcatct ggtgactcga ggtttactcg tctgatgaag gagtgtgatg 300
atcgatttgc tgaggaggct agccaggctc cagtaaagaa tgccgctgca gctgttgctc 360
cagctacatc ttcgggggca tcttccgggg ctacaactgt ggctactgaa gttgaggaac 420
aggatggtgc aaa 433

<210> 10613
 <211> 442
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-F11

<400> 10613

gcacaggtcc gaggactcgc gggtcgacac tccacgctac agtgattcga cataaattct 60
 ttcgcatcca gtcggagttt gcggaaatca tccatcaaga tgtccttcgt acctcggggc 120
 agttctacct cagaaatcaa ccgtccaaca gtgacatcga cacaatgcta caaatgcagg 180
 atgacaacgc ccgttctttc atgactccca cgatagacgg cggcttcac cagcgtccgg 240
 tcccttgagt cgagttgtct agttctgaaa catcgattgg ctcatgttgt aattaaactt 300
 taatgaactt gtagtatgtc tctttggttt cgagagtcgt tcaacttaga tgtaatcgat 360
 gctattaatg tcttgctttt ctcttcgat cgttctgtta catacttata tattgcttat 420
 gtattgtctg tgaattggta ct 442

<210> 10614
 <211> 447
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-F2

<400> 10614

ttcaagggtc gacttccacc agtgagatat ccatcatctc atcgaaagac gggacacctt 60
 tgcctctatc aagtggatc agatttccag gttgctcggg gagattttac agtttttcgt 120
 agtttagatc gagtctgtcg tcatacctat agtcacgaa aaagccacaa gaaaaattta 180
 gggttagttc atcatatccg aaccaatctg agcctttgca taatcttttt agggttttgc 240
 tttgttgaat ttgcggttgc atcgtcgggc tagttgctgg tcttagagtc tagtctttta 300
 gtgtttcgag ttctggatc aagttgtcac gccgcgcgcg caccatcatc atcgcccttg 360
 ccatctacca ccaccgtcc gaatccgtat ccatatacca ccaccaatcc gtgtccatat 420
 accaccaccg atccatatcc atatact 447

<210> 10615
 <211> 376
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-018-Q1-E1-F5

 <400> 10615

 cggaacgact ttaatgcctt cccaccaaca caagcttggt cgtggttggt cttattccgt 60
 gagttccttg ctatccaata actgttattc ttacattgg tacattaaaa tcacttatgt 120
 cctcaatggt gtgataaatt caccatcctt acgaattctt gataccagt agacttagta 180
 tcatcaccac tcgttgcttg gtcctcgtga tgtttctaac cggaataccg acacatgggtg 240
 tgtgatgtgt agattctaaa ctttgagcaa tcatcttggt ctgaagttat tggcttatag 300
 tttcactcta cgactatggc atattgaatc aacattctga cattggctgt gcaaggcaga 360
 ccatatttag ggcgca 376

<210> 10616
 <211> 445
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-018-Q1-E1-G2

 <400> 10616

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 ccaatgcgga gccattgtta gagacaacgt ctcgatcacc gtccaggagt ggaataagcc 120
 aaagaaggca cgaattgctg gtttcacttt tgtcgataag agaacaaaaa aagattgctt 180
 caagaagctt atggaacatt tcgttctacc tccggaatac aacaaattcg atgaggaggg 240
 taacaagatt gaggaaaaca aggagaggag gaggctagtc aaacagttcg ctcttcataa 300
 gatggccgac gcattccgga aattcaagca aaatctagcc catgactttg tcaagcagaa 360
 caagactccg gatttcaaag gacaatatga gaaactgaaa catgattggc cacaatttgt 420
 gaagcaaaag aaatcggagc agttc 445

<210> 10617
 <211> 446
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-G4

<400> 10617

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accttgagcc caacctccgc atccttgctc aaaagtacaa tgagaacaaa ctagtctgcc 120
gcaggtgcta tgcacgacta cccaccaggg ccaccaactg ccgtaagaag aagtgtggcc 180
ataacaatca gctaagggaa aagaagaggt ttatgtccaa gtttgccaac gcttcctaaa 240
cgttggaaat atgctgaatc aaccgtctag cgtcatatat attggagttt aagttctgtc 300
ccttgtttga agtcatgttg gatttcgctg aatcgtctag cgtcgtcata tatagtggag 360
tctaagattt gtccagttga tagtcctgtt ggattttgaa cctatgtatg ctttggaata 420
tattatctat caaatatcct gatttg 446

<210> 10618

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-G6

<400> 10618

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ttcctggcgc aaggaaacgg atggggatgg cctccttcac cgggggtcgaa caccgggtgtc 120
gatggagcac catttctttg caaagtgttt tcgagagaac aaggaaggga gaggtgtggag 180
tttatgcggg gtggaagagg aggtggaggt gcacaaaaag gaggggctgc agtttttggga 240
aactgatggg atttatggga aagagggatg gctgtttctc ttcgttaggt gtggctgtac 300
gtttcttcgc tgtgtgtctg tgtgtgtaga gggagcggag ggagcgttac agaaggaaga 360
ggaaggagaa gatgcgctgg gtgggaggaa aaggaagtgg agagaaatag acgaaggagg 420
aattaaagga 430

<210> 10619

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-H4

<400> 10619

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tctggagggtt ctccgtcgcc ttgttccatt tgtccgtcgc tgcgtggag atggggacag 120
aaagtggaag aggtggagcg caagtctgtt tgcattgggt ttgtgcatat tctcatcggt 180
gcttggagtg gagctacggc gccactgga gctgccggtc tccgacgcct ccccggtgac 240
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gatgccattt gagaggcagc tgttcaactt caacatggag tcctcttctt ccatctttgt 360
ccggagatgg agtagcggcg gtccggtgat cccaagtggc cacgtcctcg gtgatggcg 420
gactggatct acgctggag 439

<210> 10620

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-A10

<400> 10620

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gcagcaaagt agcgtaagta tttccctcag tttttgagaa ccaaggatc aatccagtag 120
gaggccacgc tcaagtcctt tgcacctaca caaacaata agaaccttgc aaccaacgcg 180
ataaaggggt tgtcaatcct ttcacggcta attgcaaaag tgagatctga tagagatgat 240
aagataatat ttttggattt tttatgataa agattaaaag taaagattgc aaaataaacg 300
gcgaaagaaa tagcttggtg acggaagatc aatatgatgg aaaatagacc cgggggcat 360
aggtttcact agtggcttct ctcaagatag cataagtatt acggtgggtg aacaaattac 420
cgtcgagcaa ttgatagaat 440

<210> 10621

<211> 433

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-019-Q1-E1-A11

<400> 10621

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cttcccatca ctaggccatc cgagaatgac acattgggtgg agtgatggat aaggctccgt 120
tcgtttcaga aagatgacaa aagagggttc aactcctaga tggcatgcat agcttagtga 180
tacgtccatt ttgcatcatg cttttatact gatatttatt gcattatggg ctgttattac 240
acattatatc atagtactta tgcctattct ctcttatttt ataaggttta catgaagagg 300
gagaatgccg gcagctggaa ttctggattg gnaaaggagc aaatattaga gacctattct 360
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tgggcgaaga aag 433

<210> 10622

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-A2

<400> 10622

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cgaacgaaga gaattatttc accccttcat gcgtcacctt aagtgcgacg gagatcgatc 120
aattcatcaa gtgccttatg ggaatcaaag tcaattccgg ttactgtggg aagataagca 180
gatttctaga cccccaagaa taaaagcttc aactggatga actcacatga ctgtcacgtg 240
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atgcctaata gtctctgcaa catcttcgac attaactctc gatagtccat aattgtgaag 360
cagctccgaa tgctatacga agagatgagt gtcataatac gtgagcttga catgtacgta 420
ctgcccgtta 429

<210> 10623

<211> 450

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-019-Q1-E1-A3

<400> 10623

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ctctatcaag tggatcaga tttccagggtc gtcgggtgag attttacagt ttttcgtagt 120
ttagatcaag tttgttcttc atacctatag tccacanaaa aagccacaaa aaaattaggg 180
ttagttcatc atatccgaac caatctaagc ctttgcataa tcttttttagg gttttgcttt 240
gttgaatttg cgggtgcatt gtcgtgtcca gttgctgggc ttagcggcta gtcttttaga 300
gtttcgagtt ctggtcataa gttgtcacgc cgccaccgta ccatcatcat cgcccctgcc 360
acctaccacc accgctccga atccgtgtcc atataccacc accgattcgt atccatatac 420
taccaccgct accaacaccg ctaccatata 450

<210> 10624
<211> 454
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-019-Q1-E1-A4
<400> 10624

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ttagatcgag tctgttctac atacctatag tccacgaaaa agccacaaaa aaaaattagg 180
gttagttcat catatccgaa ccaatctgag ctttgcata atcttttttag ggttttgctt 240
tgttgaattt gcggttgcatt cgtcgtttct agttgctggg cttagagtct agtcttttag 300
agtttcgagt tctggtcata agttgtcacg cgcgcgtgc accatcatca tcgcccctgc 360
catctaccac caccatttat ccgccaccgc tttgaatccg tatccgtata ccaccacagc 420
tgtcatatac caccaccact gccatctacc acca 454

<210> 10625
<211> 429
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-019-Q1-E1-A5
<400> 10625

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 ttagtacaac tctgaacatc ccccttggtc ttgaagattg gtactaatat actccgtctc 180
 cattcttctg gcatcttggt tgcccgaata atgaggttga aaagcttggt tagccatact 240
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 ttgctcctt tcactctttt taaagcctcc ttcacctcag actcctggat gcgcccgcaca 360
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 ccattgaac 429

<210> 10626
 <211> 436
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-019-Q1-E1-A7
 <400> 10626

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 cgtatacaat gcagtctggt aagcaaggat tccaagatct tggtgcatcc tctttgcagt 180
 cagctcaaga tcttttacga tcggagactc ttagattaga tgtgatgacc ggcgccgctc 240
 aagtagaggg agggatccac aggetgatgt catacgagaa taaatcattc tagcccccat 300
 ctttgatcga cgacgggcat acaggttctc tgcgtgtggt ccatccaatg tcggcagccg 360
 gtcacctgat attgtttgag agcagcctct cagcccgtct gtgagggccg ttcgctcccc 420
 tatcgatcta ccacta 436

<210> 10627
 <211> 392
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-019-Q1-E1-B1
 <400> 10627

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tgatcttgtc atagaaggaa gatcctgtga agaaggaggc tgacaacgtc gtcgcaccaa 180
 ggaaagctat ctaagctaac ggagtggctg cattcgtcca agaatcttag atgtagttct 240
 tctcaagtat ctttgttggc agtgtttggt gcctccttga tgtttttggt accaacaatgg 300
 agttaggatt tgttaagggt gatgctatcc ttgtgatcgc cagtggctct tatatgcgaa 360
 aacagtttca gatatttgag cattagccca tc 392

<210> 10628
 <211> 426
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-019-Q1-E1-B2

<400> 10628
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 ccggtgttgg taggtgtgag atcaacaatg gaggatgctg gaaagaaact aagaatggga 180
 agacaatatc tgctgtctcg catgaagaat ctgaaggttg caaatgtcca caaggtttca 240
 agggcgatgg tgtaaaaagc tgtgaagata ttgatgaatg caaagcgaaa tctgcctgtc 300
 agtgcaatgg ctgcagttgc gagaatacat ggggaagcta tgaatgcagc tgtggttgga 360
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 tcggct 426

<210> 10629
 <211> 454
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-019-Q1-E1-B3

<400> 10629
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 gggttgaaaa ccaggatgcc attgatgctt gcatgggttg tatgctgctg atcctaagga 120
 ggcaagagct ggcatacang aagtgcactt cttgccattc aaccaactg acaagaggac 180

tgctctgact tacatcgatg ccgagggtaa ctggcaccgt gccagcaagg gtgctcctga 240
gcagattatt accctgtgca actgcaagga ggatgtgaag agaaagggtgc actctgtgat 300
tgagaagtac gctgagcgtg ggcttcgttc gcttgctgtt gcaagacagg aagtaccaga 360
gaaatccaag gattctcctg gtggaccatg gcaattcatt ggtctgttgc ncctgtntga 420
tcccccaagg catgacagtg ctgagaccat ccgc 454

<210> 10630
<211> 443
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-019-Q1-E1-B4

<400> 10630

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cttctttcaa tttaatattc cttttataag tgcattctat atctgggacg tgcctttttg 120
caatcgtggt tccggccatg ttctccttta aataccgttt ctctgtgcaag tttaagcact 180
tgtcttctgc agagcaatac cctagtccaa ccaatacttt gatctgtcat cgagtgttac 240
actctggatg gtcgagatta tctgtggaact gcataacttc ttatggtttc ttcattgaact 300
gttattttct accaattcca attttctctg gttctgggtt gtcgtcaacc gagaacacca 360
aatagtgaat cgagtccgca ctctgattca ataactcgaa gtaattttctg ttgcttatga 420
gtttaataat cttcaattc atc 443

<210> 10631
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-B9

<400> 10631

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acttgccatt catacaatca ttccccgttg atcttggtat tacaagatac cccgaatttc 180

tctctattgt tccgagaata cttgtaccta gtgccttgta gttccttgcc acggaaatac 240
ccctatggac aattccttgc acttatcgag tattcgatca tccccggtg atcgtgtgtt 300
tcacaaaagt ttccgaaata tcattcggtc ttccgaaaat cctgagcagc ctatcgctct 360
tgagattctt gcttgcttgc attatgggta atcccataag tctagtaatc ttattggcac 420
cctttgtcac ta 432

<210> 10632
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-C1

<400> 10632

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ggcccacagc acagctgata tgactgcttt tgtgcaagat cttctaattc agatgcaaac 120
caggttccaa actatgtcag agaacatcat tacaaggata catgaatatg ggtgcaagaa 180
tcgatgaatt ggagctgagc atcaatgacc tcaacgctga aatgggcagc aatgggatga 240
cccctactaa agtgaaggac gaagaatcaa agccagcata cagctctgcc tgatttaagc 300
ataagtagca gaagcaagtc gtattagtct tgggtccatg tcaatatcat cagccattca 360
tcactaactt agtgcattgt atgagatggt attcgactg tt 402

<210> 10633
<211> 280
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-C2

<400> 10633

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taaatgtgtt tagccgtccg tccgtccgct cgtccatcgg acgagatatg catgtgtact 120
tgtacgtcgt ggatcaacgt gtagctgcac gtactttgtg tgtttatttg taccatgatc 180
gagcgagcga gaggtcctct cgctagctgc gcgcaatgta aattaattaa gcacaaggcg 240
tgcacgaggg aatggatgga agaatcgtgt gtcattactc 280

<210> 10634
 <211> 423
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-019-Q1-E1-C3

 <400> 10634

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 aacgtttacg acacatcatc aacgtttag atatatgtgat agtgctcgcc aggaaggtgg 180
 ctttggctgt ttcatgtatc tatttggtaa ggctttgtta gatagctaca tataaaaaca 240
 tatcaatccc acgcaccctc tcaccactag gcaaaagaat ttcaacatgt gatactagag 300
 caccaatata gtacatgcaa ccattgacct acaaaatddd cacacataag tatgagttga 360
 ttaatagata acacagaatc ctaccacgaa aaaccaccca caacacggca ttattaaata 420
 aaa 423

<210> 10635
 <211> 419
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-019-Q1-E1-C4

 <400> 10635

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 gtgtgaggaa agcaatggag gcccaaaca tcattacca agaactgaaa cggttcgagg 120
 catggaggga ctactggag acggttccga ccatcaaaaa gctgaggtcg tacgccgaca 180
 ggatcagggc atccgagctc gagaagtgtc tgcagaagat cggggaagac aatctcaaca 240
 agaagatgag aaggtccatc gaggagctga gcacgggcat agtgaacaag ctccttcacg 300
 gcccaactgca gcacctgaga tgcgacggca ggcacagccg caccctggac gaaacgcttg 360
 agaacatgca cgccctcaac agaattgtca acctcgacac ggagaaggcg gtccttgag 419

<210> 10636
 <211> 422
 <212> DNA

<400> 10638

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aagtacgaca tgcgccacct caaggaggcg tgcctcgaga gcctgctgga ggacatcgac 180
gcccggaaacg tgatcgaacg gctccagacg ggccatctgt accggctgca gaggctcaag 240
gacagctgca tcaggttcct cgtggacttc aggaagggtg acgagatgca ggaggagtgc 300
agcgccttcc ttcagacggc ggacagggac ctggtggctg aagtgtttca gggcgttcct 360
gcggcgtgga gtggccgggtg agccagtggc gtagctagcc caacgtgccg ggggtggcca 420
tcaatgc 427

<210> 10639

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-D12

<400> 10639

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agagaggggg agagagcccc cctccttctt cttccttggc ctaccccta gatgggagga 180
gagttcccc tctggtccat ggcgtccatg gcggtggagg ggcaggagcc ccttcgagat 240
tggatctccc tctctcttcg gttctatttc ccgttcaca gatctggcca aaaaccgttt 300
cttaattatc cggagattcg taactccaat tgcgctgaga ttttaacatg atttttttcc 360
agatataagt ttccttgcgc ccgaagtaga tctccaacga acgtacgagg agggcacaac 420
ccaccaccat gcgcttgggc tg 442

<210> 10640

<211> 148

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-D3

<400> 10640

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aagccatgga attaccttct ttgttacaat gagctcggct tctattgcat ccacgcggcg 120
gacagcggca ttaagcagct cttctttc 148

<210> 10641
<211> 449
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-019-Q1-E1-D4
<400> 10641

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tgctcgtgat gacaaaggca accctatgat cagagatttc tataacagcc aattaactgc 120
aagcggcaat ccttatgatg acacgttact tgctaagctt gaaagtgtct acacagactc 180
tggagaccat agctctacaa tgtttgTTTT caacgtcgag caaggtctgc ccattcttcc 240
ggagtggctt agtttcaaca gagtgcagc cgtttgaga cagagctatg aaattggtcc 300
tgcccgactt cttctaagtg cttctggagg tcatgtggag gggaaactttt cgcctcatga 360
agcatttgca attggtggga caaacagtgt aagaggatat gaagaagggtg ctgttggttc 420
tggccgctca tatgcagttg gtagtggtg 449

<210> 10642
<211> 443
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-019-Q1-E1-D6
<400> 10642

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tgcaaaagag atcgctgctg tactttcctg acagcgcggt cgattacctt atcttcttca 120
tcgactgcat cttcaactct acctccacc aaccgaatag catctaccg atcagctgcg 180
aaggctttga tgctggctct cgtcctggac tatecttcgt gcttccgat gatgcagtgc 240
ccaccggcaa ctgggtgcaa gcgtgcaacc aagtcataca attgcctgtg cacaataacg 300
gcgagatcaa cttactgac cctggatgga caaacgggag tggatatgcc agtggttcttc 360

gtcaggaatt ccagctggga tggaacgaga ggcggaatga cccggcatgt atccagtgcg 420
agggatccaa tcccaaggga cag 443

<210> 10643
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-D7

<400> 10643

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gatctactaa aaaacctaac tcttggttag atctaatact gagcggttga tatcgatcta 180
gcggatgaag gggaaggtgg cttacagata cgttggcgac gtacggaggc gacggagcgg 240
cggtcagcgt cgaacagggc ggcgattccg gtggtcgcgg gcgtcgggtg agtggctgaa 300
cggatgcagt aaagcgaggg cgctcggggg gtgggtggagt tcgcgcttgg agatgacgga 360
aacgagcagg gcgatagtga cagcgggttg gcgctctgca gctccgggtg tcggcgtag 419

<210> 10644
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-E10

<400> 10644

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gagcgtctca aagataattt tgatagcaag cagttaacct tcttcactg catgtcggaa 180
tggtacacaa accaagcaac gccagcgag ctacagacgc aggattcttc gaggtcgatg 240
atgcaacggg aggatggccc catgcgggtg tgactaatta ggcgattgta aacaaaaatg 300
tttatagact cactgatgtc cgtagccacg taaaccacga gaaattgaaa ttctttctga 360
gtaaattcct ttgctgtggt tgaaatgacg aggaagatat agcaggtcgg aatgatcatg 420
tccgttg 427

<210> 10645
 <211> 442
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-019-Q1-E1-E11

<400> 10645

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 acgaattcag ggtgttgccg aaaggtgagt gctgaaagac atccgtggcg gtgaactcca 180
 tgaccggagc ccaatcgggc ttaaccgaga gaggtgcggg atttacggag tccggcacct 240
 cggagtcacg ggccttgcca gggactangc tggatccgg ctctatcgcc gtagagattg 300
 cagtttccgg ggtggcgtct aaccatccgt cnccgattgg catagtgggc tccgagctaa 360
 tggtcggagc ggacacctga gcgacgtctt gggcgttgct cgatgacaga gctaaatcgt 420
 gctcaacatg acagtgcggc gc 442

<210> 10646
 <211> 413
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-019-Q1-E1-E2

<400> 10646

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 agtcttcgca gctcgagaca tggcgggaaga gaatgccccca attgcagttg acgctcaggt 180
 tgcgggacct atcacagttc ttggagagcc catcgtcctg atgactgctc tgcagcttgt 240
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 gattgataag catgctgctc acatatgtgt gcctgctgag gactgagaac agcctgaata 360
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<210> 10647
 <211> 425

<212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-019-Q1-E1-E4

<400> 10647

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tgcaaaaaaa gaaagcatgt gaaaaaggta ttaagaaatg aacaaaaaat atttgcaagg 180
gtagaaatct aaaaaagttg aagagtangt ggaaagctag tagttgccat gtangtggaa 240
taagagttgc catgtgtcat agtttagcagt tgccatgcaa atccagcaag agttaccttg 300
ctagccaact tgaagaatga taaaaatgtc tgatctgcta ggaatgcaat ttcaaaacta 360
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agatg 425
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<210> 10648
 <211> 434
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-019-Q1-E1-E5

<400> 10648

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gggaagcctg tcaatgctga agatgggcaa gtagcatgat gtgtagcgag ctggtgggga 180
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actttgtata caaagcaatc aaccgaacat ccaacgatag gtgctggggc ggaagcagca 420
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<210> 10649
 <211> 411
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-E9

<400> 10649

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tctgcggcgg cgctcctctc gtcgacaaga gcagcgctct cgccgggctaa gagagcatct 180

acgtgtaaca caaggctggg tctctgcttg catgcacgtc tctgtaatct acgtatctac 240

ctcctgtgaa tgtatgtcat caacgatgca aagtagttga ttcgaagaga tggtttatgt 300

atgtacgtaa cgcagttacc agatactcct acgtcctact ttggaaactg tatcagggtg 360

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<210> 10650

<211> 461

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-F1

<400> 10650

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ttacagtttt tcgtagttga gatcgagttt gttcttcata cctatagtcc acgaaaaagc 180

cataaaaaaa atttagagtt agttcatcct atccgaacca atctgagcct ttgcatagtc 240

ttttctgtgt ttgcattggt gaatttgagg ttgcatcgtc gtgtcaagtt gctgggtctta 300

acgtctactc cgtttagagtt tcgagttctg ttcacagggt gtcacgtcgc cgctgccgta 360

tatcaccacc gcatcagcat catcgctgct gccatatacc agcaccgcac cgacttcac 420

gccgctgcca tataccagca ccacatattc accggcaatc c 461

<210> 10651

<211> 439

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-019-Q1-E1-F11

<400> 10651

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ctacataggc tcagccaagc ccaactggga caagtatgca aaagggaaaa aaacgatgca 120
ggtaacctgt aacgccaat atgcgaccat actccatacg tgtcgaggca cgacttgggg 180
catagccgca tattggtatg gtcacgagag tgtttgtatc tttgcgcac tcatgtactg 240
aatatataga atacgagctt tggcttaca tgcgccacaat gtcacacaat atcatcaagt 300
tatacaatca ttcaagatga acacagtgtc cagctacaga cgaaatcaaa tgaatagaag 360
gcaaccaccc aagctaagtc ncgatcgacc ctactgggca acactactga tcatccggaa 420
aggaaacata gtaacaacc 439

<210> 10652

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-F3

<400> 10652

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ctgggtcagg atcgcgaccc agtgggcaac agcaggtctg ttcattctggt cccttgttgc 120
tcccctcctg ttcccagaca gggagttcta gatcgacctg gttacctgct agtgcatacc 180
tgctagtgca tcatctgatt ggagccacct acgtattgta tcgtatcgaa cgtgttttgg 240
ctgtgatggc taagctgact atctgtattc tggctctgtaa tattgtgtaa gcaaaccat 300
ggcaaggagc cgggtgttgt gtgacgttgt cgagtctggt ctgcataatg tgtgacctaa 360
ggcattgttg ccagtatttc aacagtgaag atacggtctt tggttgcaaa aaaaatgaaa 420
caacgaaaaa aaaaaagcg gccgctct 448

<210> 10653

<211> 420

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-019-Q1-E1-F4

<400> 10653

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tttaaggagg atcccagcca ggaggcctgc gcccctttca attctgtatc ccattttgtg 120
caacccttct taaggcaaac ttgtttaact tatgtctgta ctcaaataatt gttgcttccg 180
ctgactcgtc tatgatcgag cacttgtatt cgagccctcg aggcccctgg cttgtattat 240
gatgcttgta tgacttattt atgttttaga gttgtgttgt gatatcttcc catgagtcnc 300
tgatcttgat cgtacacgtt tgcgtgcatg attagtgtat gattgaatcg ggggcgtcac 360
aggtatatta tattagagtc ctgaagatat gcaagaagca aagaaatcta tgaaggaaaa 420

<210> 10654

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-F6

<400> 10654

caggtagggt catgatctcg taatttatta ggattaagga agcaatataa aatacacttg 60
ctttacaacc tgaaaataatt gacagaagct aagatttgat cctgtgctca catagatgat 120
tggattgggc agaaatttgg aggagtgtgc aaaatttcat ctcaatttga tactcctagc 180
tagtacttcc ttcacaaagc cttctgtctg acaaaaactt tgaaaatcac cgagggaagt 240
tggctaggca aatgaggttg aattttggca tgaggttaatt atttggacat aaaaatgccc 300
aaaaagtttg ggagcaacta gagaaagata aatgacactt ccttcacaaa gtgccgttca 360
ggacataata gaaaaaggag tattggggaa ttatttttga actggccaag gaaatgtttg 420
ggca 424

<210> 10655

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-F8

<400> 10655

ttcgcggtgc gacgaccact ggccacctga tctataagct tggaggcatt gacaagcgtg 60

tgatcgagag gttcgagaag gaagccgctg aaatgaacaa gaggtctttc aagtacgcct 120
 gggtgcttga caagctcaag gccgagcgtg agaggggtat caccatcgat attgccctct 180
 ggaagttcga gaccaccaag tactactgca ccgtcattga tgcccctggg caccgtgact 240
 tcatcaagaa catgatcacc ggtacctccc aggctgactg tgctgttctc atcatcgact 300
 ccaccactgg tggttttgag gctgggtatct ccaaggatgg ccagacacgt gagcacgctc 360
 tccttgcttt cactcttgga gcgaagcaga tgatctgctg ctgcaacaag atggacgcca 420
 ccactcccaa gtactc 436

<210> 10656
 <211> 436
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-F9

<400> 10656

ctgcggggtc gacatcatcc accatccacg agtgctactg ttcattccacg gttcacctcc 60
 gccagcctcc acctacgact gctcatccac gcactcctgt tcatccagcc tccagcactc 120
 ctccaccggc tactattcaa ccagtcctct ccacgggggtc ctgttcaacc acctccacg 180
 ggctactgtt caaccagccc tccacggggg cctattcatc cagccctcca cagggtcctg 240
 ttcattccacc cccaaccggc tcgatcaggg tcctgttcat ccacgggcaa cggcctctac 300
 taccacgggg tcctgttcat ccaaccccca ctgggaactg ttcattccacc cccaacaac 360
 gctcattgtt catcaagagg cagcagggtc gatcatcttc agttagcacc agtaacgaag 420
 gaattgctcg accggg 436

<210> 10657
 <211> 102
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-G11

<400> 10657

tacacctga ggtgagtcgt attaatcgca cgacggggaca gctttgcctc tatcaagtgg 60
 tatcagatgt tcagattgcg cggtgagatt ttacagtttt tc 102

<210> 10658
 <211> 425
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-019-Q1-E1-G12

 <400> 10658

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cgggtcgacg ctgcacccga taatgagtcg gaatatccta tgctgatgc ttctgagctc   60
tttacaaatg tctacgtcaa gggtttcggc gttgagtcac ttggcgcaga tagaaaggag  120
ttgagagcta cactcccata ggtcaccaac ctgaagatga agacgagtac tcttctaaca  180
cgatgatata tcgaggagga ataagcattg gtgaacaaac ccttgggtgt tgctggcagt  240
atattgttgca aaacgaacct gtatagagat gtgatgtcag gggaattcgt tccttatttg  300
ttatgttttc cttttttttt ctcttctgc aattcagttt aactgctgct agctggcgat  360
ttggcctgca taatcgcttc tgttcgcana atcatgaggt ggaaattaat gtttgctgt   420
gtcgt                                           425
  
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<210> 10659
 <211> 454
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-019-Q1-E1-G3

 <400> 10659

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acagtgggag gggcgggtgat atgtaccgag tgcacgaccc gttggcttgt atcactcacg  120
tgccgcttgc gtcatgggcc ccgcctagcg cgacaggagg gagtgcacgc atgaacgtat  180
tgttaaaatt cacaacattt tttagaataa tagttggttt tgtttcaaat ttaacaatgt  240
tcataaattc gattttttaca gattgaataa catatctgta cgtttaacaa gaatgtttgc  300
aaattcaaca aagtccatgt gtttacgaat tcaaaaaatg ttggcgtgtc caaaaaatgg  360
ccatgaattc atacaatgat catgtagtca aaaaatcttc ataaattgga aactcttcac  420
ggattctaaa atgtttgtga aggccaatta attt                                           454
  
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<210> 10660
 <211> 400
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-019-Q1-E1-G4

 <400> 10660

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 cgacaaacct agtttagcgc cacttggcta attcaaggct tttgaaatat ctgaatatcc 120
 tcctaggcta agaccaatac tgcgagtatc tatctgtttt cagtatcatg tattttatgt 180
 ttctcaacca tctcagtttc atgtaataga tagtggacac tttaaaaatg ttcataaaat 240
 gcaattttta aaaattgaac acaatatcta ttcgttacac acatatgtat gcatattcaa 300
 cagaatacca tgtatatacg gctgccccaa aggttcgacg tttacttacg cttgcaagca 360
 acttcaaacc tcttcaagtg tttcaccaaa tttcaattaa 400

<210> 10661
 <211> 450
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-019-Q1-E1-G5

 <400> 10661

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 ctagagcctt ttcacaccgg tttttaaaaa aatcattttg ggttttcttc tctttttctc 120
 tttttcattt ttatttatth tcattttgcy gtcattctta atattcgtga actttttttg 180
 aatttggtta gattattaaa attttaaaata ttttcgaagt tctgaacatt ttttgaattc 240
 gtgatttttt tatattgtga tttttctaaa aactgcgaac aatttttgag tttgtgaatg 300
 ttttacagaa ctgctaaaat ttcaatttta acatttggtc aaataatgat caattcttaa 360
 attcttgaaa ctttttgaga ttgtgaccat tttttgaaat atgacaacat tttatgattt 420
 tttttaaatt caagaacatt ttttcgaatg 450

<210> 10662
 <211> 439
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-G6

<400> 10662

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ctgcaattaa gaggggggtca gatgtggatt gaacctgttg ccattcgcag ccagcttaat 120
catctcaaga aactgttcat tgcaaactg gcaatgaact ggggtacatt ctggattctc 180
accctacttg ctgccgcacc tgccttgagg tcgctccatg ttcattttga ctcagagaag 240
gcgagtgttt cagtattact agatgtgcaa gcggaacacc atcagcacca ctatcacctg 300
aaagaactca tggtcgttgg cttcaacggg gtggcatggc agacgggctt tgtgaagcgg 360
atcatgcagg catgccgat cctggagcat gtccacctgc tggacgggca cgtcgtggag 420
gatgaagaac ggcaactcg 439

<210> 10663

<211> 405

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-G9

<400> 10663

gggtcgactg cgagcaccaa caggtagacc tcacagcagt cccacggcgc atcagaatcc 60
acaccgcac ccgcgccaag gagactcttt gggcagtgga tcggcctcgg caggtcgtcg 120
ccagagaata gatcgcccga gggctcatcg tatcgacaaa tgcactctcc tcggatgtag 180
ccagccccct gcggaggcaa cctaagttaa aacttcacat ttggaacctg agttgcttgt 240
aagaaaagat gggggaaaac ccatctgtaa ggaattaaac cgggtttgcg cgctgaactt 300
ccggagaatt ctgcgaagga gaaacaggaa ataaccgga gggaaaacgt tttggtttgg 360
tttaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagcggcc gctct 405

<210> 10664

<211> 373

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-H10

<400> 10664

gggtcgacgc cactgaggaa ataaagctgc tgtcagacca tctcacatgg ggctggtaaa 60
 tgtcggtcga gaaaattaaa tttcgggtcaa atttccgata tctcaccttg gctaggtaat 120
 gtcattgtcg gccgagaata tcaaatgaaa ctttgtaagt tgtactaggc tacttagact 180
 ttgaactaat gtgtgatggc cgtggattgt acgtcttgaa ctaatctgtg aaggttacct 240
 tggaagggtta acttttgttt cgcttgattc ctgaaaaatt tggaaaattt ccatcatatt 300
 ttgttcaaaa actcaaattt tggctctcat attccatctg tgatatctat ttatatataa 360
 aaagtaaatg atg 373

<210> 10665
 <211> 431
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-H11

<400> 10665

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 ggaagcaaca gaggaagag tctgaaaggc caacagataa gcagttatac cagggttcttg 120
 agcagaagga ggagaaaatc gcacctggaa ccctctatgg gtcaagccat acgtatgtgg 180
 ttggggcaca ggataaggct ggggttaaaa ggggtgatct tctcaagaat caaaagtccg 240
 acaaagtgga cgtcaccata catcccagg agctcgaggt tatggacgat gtccctggcag 300
 ccaagtatga agaagcccgg gaggaggaga agctccggaa ccagaaggaa gacttcagcg 360
 acatggtggc ggagaacgag agcaagagga agaggaagca cgagaaggac cggaaatctt 420
 ccaaaaagaa a 431

<210> 10666
 <211> 387
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-H12

<400> 10666

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 tgctcatcta aagatttccc atcaactagg ctagtggggg tttagcacg agcgcataag 120

gatcgaagaa gatccaagta gaacacttta agtggatcca tatcaataga tttttagcaa 180
gcaaagatga aagcacatag aaggcatatg gagacacgag caaacaaaaa gacaagcaaa 240
agagaggaga ttgggaaaga gagggcaa at aaaacggcaa aggtgaagtg ggggagagga 300
aaacgagagg caaatgggaa ataatgtaaa tgcgaggag atgagtttgt gatgggtact 360
tggtatgtct tgacttgtgc gtagacc 387

<210> 10667
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-H2

<400> 10667

cgacacagat ccctaaactg cgtcgtaata acatttttagt actcacactt ttgctgatg 60
acttcagatc tgaacctacg gatatatgtg tggacctgaa aatgaaccgc cagatgctta 120
aaccatatta tgaccagctg ggatgcaagt cgggtgtcaac aggtgctttt aaaccatttt 180
ttatgacgct tccagcacc ctcaagttcc cacaacaagt cacaaggaga aggcggcgaa 240
aataaccatc tcagtattgg tttccatttg atatggttgt gataggaaag gtatgcattg 300
ccaccgtcga aagaacctat gtgccctcag ctcaagttca ccaatgtagt ggagaaaatg 360
atgacgggtg ttgttctgtt tttgttttct attgtcgctt gggaattgct acaagag 417

<210> 10668
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-H8

<400> 10668

gacgtcacac tgtaaaccgt ctccaactca ctcgcttgac gactacttct tggttaattca 60
gtcaactatc tgcacatgta attaagaaga ccaagaagtg tacatggatc tgaatggaga 120
agaggatgag gattgcaat gacttgtgca tcttccatga tcagaaccgg atctgtttat 180
ttttgcgtga tggtcgtggt ctcaattgta tggttgcac gtccatggtc agaactggat 240
ctgtttattt ttgcatgatg gtcgtggtcc gacttgtatg gttggttggg agtctttgtt 300

tgcattggta catggttgaa tattgtacaa tggactaatt gtagtgtata tgtgttgtgt 360
 catactgata gtttttgttt gcatggttga atattgtcca aatggactag ttacagtcta 420
 tatgcttata taaatgat 438

<210> 10669
 <211> 416
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-019-Q1-E1-H9
 <400> 10669

gggtcgacgg cacggttcat gtttcgtggg tccagcctag agtacttggc atcccacagg 60
 tgaaggcggt gcgtgagcgc ctggactcgt gggtcggcaa agtgcatacc aactgttgt 120
 ccatcgaggc agagaccccc gatctcgtgg cggcttagct tgttggccaa aaatgattct 180
 gaataggctt tggttgtcag caaggcggcg gtgtaaaacg agagaccatc tggctgtgct 240
 gcgcgtgcta gctgctcttt tcttgataac gaaaacttgt tgccttgggt gtcctattgg 300
 tctggacttg taacttcctt ctatcatcac ggatcgaaac agagaaatca taccggcaga 360
 gggtgtcact agttttttcc tgttgaactt tataatctgt aatccagcgg tttgtc 416

<210> 10670
 <211> 356
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-020-Q1-E1-A11
 <400> 10670

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 cgagtcattg acctgtaggc tttctttgtg tggaggtttg gagcagctcc ttggcacaac 120
 cctactcgag cttcccagac gagacttttg ctttggttcc tgcgaaatac tggcagtatt 180
 gcattttgcg tttcaaactg gtcaaggggg aagtggggta gggctttttt ttcttcaaaa 240
 tctgagtatt tgacttgtaa cctaactatg tggatcgagg gaactgcaga ccattgtttg 300
 tagacggttg cttccacgat gatgaattca tccatttatt acaagtctgt cgaaaa 356

<210> 10671
 <211> 423
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-A5

<400> 10671

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tcgcgatgca gaccgggggtt gcatcatggg cgaccttggg aatctccagg gccttcgtgg   120
tggagcagga gacgttgggg acgagcatgg acgaggtgtg cgtcatgggt gacgctgccg   180
gatcgacaag cgaggtaacc acatgagggt caccagcgct tgcaacaccc aatagtgcgc   240
tcatctcctc tgccttagca cataatctct tgtgatacca caacaactgc tcgttggcag   300
gcatggcatc ccaactccgga ggtaagtcgg caggcatgtc gtcgtcgccg gtgaaacgga   360
tgaatcgggtg tgggagaaaa aatggggaaa attggatggt gaaaagggtg tgggctggct   420
ctg                                                                    423
  
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<210> 10672
 <211> 374
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-A7

<400> 10672

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cggtcctaaa ctcccgggtc cacgatagct agacagagca aggttgatgc atcaatacag   60
ttctgaagat ggagcgatgg cagttggcgg cggcggcctc tcagagcacg ccggaccggc   120
gagacctatg cccggcaggc gtcctggatg ggttctcagg tcttagatgt tacgtttggc   180
tgcgatgtct gtttggattt atgcccaggc tatctgcgcc cttcatcaa ctggataagt   240
gtaccaacag tttgttactt agacggcagc tttagtctta ctgtggtatt actttgtaag   300
gtcttgttac aataattaat aaattggcct tatccatcgt ccaaatacaa aggccttttg   360
tcttccccct tttc                                                                    374
  
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<210> 10673
 <211> 428
 <212> DNA
 <213> Triticum aestivum

<223> .Clone ID: LIB31-020-Q1-E1-A9

<400> 10673

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gtaacattaa tattcttgaa taattattta gtaacactaa tactttttga ataagtagtt 120
tgaccatagt ttgaccagat ttaacaaaaa taaaaaaaaa attaaaattt gagcataact 180
tttttccttt tagaacttga gaattctaaa aatttgcgaa aagggaatgt catgggaatg 240
gagatctgcc gcgccggtat tagactagtc gattagttga agtatgttca acattatacc 300
tccagagtcg gacaagctcc gcttttattt gaagtatgta ggaaatgtaa ttccgtccag 360
ttagttcaaa cagtgggtcca aatgtatgtg ggttctcttg gatagacagc tcccgcac 420
gtatccct 428

<210> 10674

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-B11

<400> 10674

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tcgagtctgt tttcatacc tacagtcac gaaaaagcca cacaaaaaat tagggtagt 180
tcatcatatc cgaaccaatc tgagccgttg cataatcttt ttagggtttt gcattgttga 240
gtttgcagtt gcacgctcgt gtctagttgc tggcttagt gtctagtcct ttagagtttc 300
gagttctgtt cacaagtagt cagccgccc ccgtatcatc atcatcaccc ctgccatata 360
ccaccatcat catcacgct ggcatatgac accatcgta tcaccattgc catatgacac 420
catcatcatc attgctgcca aataccaca 449

<210> 10675

<211> 405

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-B12

<400> 10675

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ggatggcttt tgcaaacccg acatgcagct atgtggttca tgccaacaac aaatatgcac 120
aacttgattc gtgctgatat ctagactgag ccatgtattt tgctgctgta gcacgacct 180
cttttgttgg gtattatgta ctgttgtag tttgaagcac tcactctggtt tgaaggatag 240
tagatacctt cctaggatca agtgcacct cactcacctg cgtaggatgt actgataatg 300
atgatggaga tgttgtgcag aagcctaata tatatatata tcagttaggc ttcaagtgcg 360
tacttgtag ttaaactat gtatacattg tgacactaaa tacga 405

<210> 10676

<211> 458

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-B9

<400> 10676

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tcctgatgct attctttctt attttctgaa ggagaggctg gcatttgaca atacggttct 120
gtgtgtgaat tgactactgg tactgcagcc tgaaattttt cttgtggagc ggaccgaagt 180
aatccatcaa gctagctgca ttattttggc aggacatgtc cgaagaagac atatatgcat 240
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agaaacttgc agataacaat ccaaagaagg cattggattt cggcagtagt gacgagcctc 360
ttcagtaggc ttttggtttt tctacaattt caagctttag agctgaacta ttgtcccaag 420
gtagtattta cattattttc gaaccaacaa tcacttca 458

<210> 10677

<211> 436

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-020-Q1-E1-C10

<400> 10677

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gctagctagc tacttcgacg tactcacctc atcatggcgt caaacacatg cctgaagtcg 120
aaccagcttc ctgttagaac aacaaattgt actattcctt tgtactccca cctgccgtcc 180
ttttggcttt cggatgatcg gtaccaggta ttgaaaatat actattacgg aaactaaatt 240
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gtgattcnct ctactagtgg tattttatcn caaagaataa cacaacgtac tgtgcatcag 420
gagcgtctac agatat 436

<210> 10678
<211> 466
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-020-Q1-E1-C12
<400> 10678

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acccgactct tctcgaagca tttgcgtgta gagaagctct tgcacttgca gaggacctga 180
gaattcagat gatgcacgtt gcttcagatt gtgaggaagt ggtgaaggac attaagcaag 240
ggtcgggagg atatcatggt gccatcatcc aggaaataat tgctaggaaa aatgatatga 300
tttcatgtac tttcactcat gaacgtagag tttttaattt cgaagcacat aatctcgtca 360
agtttggttg taatttacgt gtaagtcgtc atgtatggtt ggggtctcct catgatcaaa 420
acattgtacc tttaaattatt gagcagttaa agacgtgaga attccc 466

<210> 10679
<211> 392
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-020-Q1-E1-D11
<400> 10679

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gtaacggtag ctagatcaat tgtatgccct tgtttgaatt gagtgggtgtg atatgaatgt 120
gtttgtccca tgtgcatatg ggtagtgatt tttttctcct tagacccacac tctattctaa 180
tctgtccctt ctaaaaccta tcagatgcct ccgacacgtc accccggatt tgtcttccca 240
ccgaagctca cccagttcat ccagcagcat aatgccttga tgcagctgct agtcacacaac 300
caacgcaaca acagtaacaa ccacaacct cacaatccac cgccatcact tcccgtagat 360
cacttcaccc gttttctgag ggtaaatccg cc 392

<210> 10680
<211> 418
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-020-Q1-E1-D2

<400> 10680
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ctacgtgata gcatgccaaag tttcatgaat ttcagacgag ttttggtttt actagcattt 180
aaaaaccagg cacctcaatg ttttgccggc aatcaacggt gccctggtgt ttgaaattcg 240
ttcccatthc ttgcatggga cctaagcatg cacccaagga cgctgatttg atttttcaac 300
caatttatat gcaactggagc atgcgcatgt agttcaaatt tgaattatgc acataaatgc 360
attgaaaact cagttaatgc ataaaaatgt cccaaacgaa cccgaaaaat cataaaaa 418

<210> 10681
<211> 462
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-020-Q1-E1-D5

<400> 10681
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ttggccattt tgaaggggaa catctagtac acttatcctg actaaagttg gtcctcgcct 180
gccaaaggct ctgacgatga cgccttcttg ggctccacga tgacctccat cctgccgttc 240

tgctgggtctt ggtcttgttg gaccgaaatg gtaacctttg cctgatgcct tggcctgtgc 300
 ttgccccatt tgcaccgaag gggaaacaag gacactgccc aggccggcac ccacctggct 360
 tgggtcgtca tggcttgcac cacgggcacc tcatgatgta ccccgcttg atctctccgc 420
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<210> 10682
 <211> 415
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-020-Q1-E1-D7
 <400> 10682

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 ataggatgga gcagcagcgt gatcttgggg atttgttcag catgctgcgt tcggggatca 180
 gtggcagaga agatgggggtt ggagtcagt aaggtgacga gggcgtcagt gagagatcct 240
 tgcacgccac gtccataacg atggtcttca ttgtgcggtc aggcaggctc atcctacact 300
 acacagacgg ggaaatccca ggtcgtcgat caagaacaat tcttctagtt ggggagcctc 360
 gtggtgaagc ctcccagga ggaggatcaa gcggcaatgg tgatgctgag gccac 415

<210> 10683
 <211> 363
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-020-Q1-E1-E11
 <400> 10683

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 tgtgcaataa cacagattgc acaccattaa ctcatggctt tggatgtaac cgattgtttg 120
 gcaaacaagg caaggaggac ccttgttgga aaggaatata aggttacaaa ctgggttggt 180
 gtgaagtctt tccgtgagcc ctggtactgg gaaaattggg gaatgatatg atatgttgta 240
 atgtgggtgg cgaaattttt ggataaacat gttgtaatga atgtcacctg cacaatgggc 300
 cgtgttacca aactaatata tgatcctgaa tctggttaacc agcattttcc accaaaagaa 360

<210> 10684
 <211> 417
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-020-Q1-E1-E12

 <400> 10684

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 gccgaggggtg aagcagaggc caagtacctg tctggcctcg gtatcgcccg ccagcgccag 180
 gccattgtgg atggcctgag ggacagcgtc ctgggcttct cagtcaatgt gcctggcacc 240
 actgcaaagg acgtgatgga catggtgctg atcaccagct actttgatac tatgaaagag 300
 attggcgcgt cctccaagtc ctctgcggtg ttcacccccc atggccctgg tgcggtgcgc 360
 gacatcgcca cgcagatccg tgacggtcct cttcaaggcc agtctgcctc tgacaac 417

<210> 10685
 <211> 398
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-020-Q1-E1-E4

 <400> 10685

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 tcctttgaga ggaaagatat ggaaagagag ttgttgcaa agctctttgt cgggctttac 120
 aacggtggat ataatttatt gagcaagcct cagctcattg aggggctttc atctgttctt 180
 gcttcattgg aagatgctct aagtgattct ccaagagcgg cagagtatct tggacgactt 240
 cttgcaaggt ttgtggtgga gaagatactg gttttgtaag acgtaggtaa attgattgaa 300
 gaaggcggag aggagcctgg acaccttggtg caggaaggca ttgcagctga tgtccttggg 360
 gcagtcttgg agtggatcaa aacagaaaag ggggattc 398

<210> 10686
 <211> 419
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-E9

<400> 10686

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gggcagtttg gtgtcggttt ctactccgcc tacctcgtcg ccgagaggggt tgtcgtcacc  180
accaagcaca acgacgacga gcagtacgtg tgggagtccc aggccggtgg ctcccttcacc  240
gtcactcgtg atacgtctgg ggagcagctc ggcacgggta ccaagatggg cctctacctc  300
aaggacgacc agatggaata ccttgaggag cgccgcatca aggatctagt taagaagcac  360
tccgagttta tcagctaccc caactccctg tggactgaga agaacactga gaaagaaat   419
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<210> 10687

<211> 409

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-F10

<400> 10687

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tatcttttga gctttatagt tttgctctag tgcttcactt atatctttta gagcacgggtg  180
gtgtatttgt tttatagaaa ctgttggtct ctcagtcttc acttagatta ttttgagagt  240
cttaacaaca tggtaatttg cttaaaatcc taatatgctt tgtatggaag attaataata  300
aaactttcat atgagtgtgt tgaatactaa gaaaagtttg atgcttgatg attgttttga  360
gatatggacg taataatatc aaagtcatgc cagttgagta gttgtgaaa   409
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<210> 10688

<211> 477

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-020-Q1-E1-F11

<400> 10688

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 gggcttgaca tgaaaatcat ggttattgga ttgatatgtg cttgccttag cgtgttcatg 180
 tacgggtccc cactcactgc cgtgagaacg gtgatcgctt caaggagcgt ggagtacatg 240
 cccttcttcc tctcattctt cctcttctc aatggaggag tctggggccac gtatgccata 300
 ctcgacaaag atgtcttctt tgggggtcct aatggaatag gctgcttctt gggcggcatc 360
 cagctgggta tctatgcaat atacaggaac agtaagggtc gctctcagtc tcatgacagt 420
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<210> 10689

<211> 456

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-F8

<400> 10689

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 tttttcgtag tttagatcga gtctgttctt catacctaca gtccacgaga aagccacaca 180
 aaaaaaatt agggttagtt catcatatcc gaaccaatct gagcctttgc ataatctttt 240
 tagggttttg ctttgttgaa tttgcgggtg catcgtcggt ctagttgttg gtcttagagt 300
 ctagtctttt agagtttcga gttctggtca taagttgtca cgccgccgcc acaccatcat 360
 catcgcccct gccatctacc accaccgctc cgaattcgta tccatatacc accaccaatc 420
 cgtgcccata taccaccacc gatccatct catata 456

<210> 10690

<211> 301

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-F9

<400> 10690

gtccacaatc gtggaaataa acaagggtcc ctatcattcc cggatgataa acggggattc 60

atgagatttc cctatgtcaa tcagggttac actctagatc ggtaagccaa gtacagttta 120
agaacaactg gagccagaat cctaaaaatg ggtcaactgc agagaagatg atgcaataat 180
taatgggcct taacaagcca agggccaatc cagggaagaa caaaatgcgc caacaagttc 240
tggtggaacc aaaatataag ttatgttgta tcctaattcc ctttttttgc cggggaaaac 300
a 301

<210> 10691
<211> 458
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-G10

<400> 10691

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gagttcttac ctggaaggcg tcattctggc aaaccaagat aaggataact tcctcgtgcc 120
ttactttccc aagtaagtcc tcccctcaac cggcccgtaa catataaatt cttagatttc 180
gatcggtttt ctttttagcat tcagtgtttt ctacagtgac acacattgca cgctcatcct 240
cctaagcccc aaatattcca tggccacata ttctgaccgc gaccgtcagt ccaacgtaga 300
ctacacaaat gtcaagaaag ttcttgatga tgttctcccc ggctacgcca aatctggagg 360
caccttcacc aggcctaatc gtaagtacgg gaagcaagtg ttctcccaca atacgacgtt 420
ctgctgcgtc aagcagccgc ctgacggtaa gaagggtg 458

<210> 10692
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-G11

<400> 10692

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acgacgagcg cacgttgagg gagcacaata tacacaagga ttccacgac cttctcgtcc 180
tccaccacg cccagaggt gggatgatca tcttcgtgaa gatgttgata gggaagaccc 240

tcactttcga ggttgagagc tcagacactg tcgagagtgt caaggtgaag atgtaccaga 300
 aggaaggtat tcctccgata caaacacgcc tcactctcgc cggcaaggag ctggacgaca 360
 agcgcaccct ggcggagtac aagattcaga aggaggatac ccttcatcat ctgctctgcc 420
 tttgtggttg ttgatcgaga tgc 443

<210> 10693
 <211> 415
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-020-Q1-E1-G4
 <400> 10693

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 atgaagtttg gcccatgcat cgggtgtcaac cggcttcagc gctgggagcg tgcttccgcc 180
 atgggcctcc agccaccgcc ccaccttcat gatctcctag cgcgtgcctc ctccggaac 240
 aaccgcaaca acggcggccc ctcccctgag tgccctctggg agggtaagat ctagaatcaa 300
 gtttcttccg ccaagagtgt tccatggcaa cctagcaagg cttgcctact gtttgggacc 360
 atgtagttaa gtctgaaact tttaccgcgc gaaactctcg ctgttgact gaac 415

<210> 10694
 <211> 458
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-020-Q1-E1-G5
 <400> 10694

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 gaaggtggac cccctcgaga gctcggttgt ggcattacca ccattaccac cctcagacc 120
 cagccagatg ctcgactccg agaaggggga ttccgacgtt gcaatgtctt gctcgtccgt 180
 gtccattggg caagtgggtc ctgtaggtga tatggttgtc gcaccagag cattggctcg 240
 tgtgcctggg gctctcatag caaaagagat ttgtcatttc ctcgctacct tggacgctgc 300
 taacctgga tccggcaaga cgattgggtg tctccttaag gagaaggcca tcagggataa 360

gaaaagtggg ggtgctagct ctcgtcctgt cgtctttaag gagaaatcaa acaagtgcag 420
aaccaagaag agtggcgcta tagaaaaggc gtccgtga 458

<210> 10695
<211> 416
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-020-Q1-E1-G7
<400> 10695

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aaagaaaagg gctacaatta ctagaatacg tctaaaaaaa agcatacctc atcactgcag 120
tttgggtggga catgcacatg catgaacttc ccaagacctt gtaaaaccgc caaacaagca 180
aaaatcgacg ccaaactggg gtttcaactg gtgaattgtt gagaatgaaa atgagtaagg 240
aaaagtataa atagacaaat gcatttcag taagtacatg aactgattag aaggaaaaga 300
aaaacaaagt taccggtagt ttcccataag aaatttcgtc tgcttggaca tccatactaa 360
gcaattcaga tatcttctct tttttccaaa cattgatagc aaatgcacca tcgggc 416

<210> 10696
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<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-020-Q1-E1-H10
<400> 10696

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agcaatggag gcccaaaca tcatcaccga agagctgaaa cggttcgagg cttggaggga 120
ctcactggag acggttccga ccatcaaaaa gctgaggtcg tacgccgaca ggatcagggc 180
atctgagctc gagaagtgcc tgcagaagat cggggaagac aatctcaaca agaagatgaa 240
aagggtccatc gaggagctga gcacgggtat agtgaacaag ctccttcacg gccactgca 300
gcacctgaga tgcgacggca gcgacagccg caccctggac gaaacgctgg agaactgca 360
cgccctcaac agaattgtca acct 384

<210> 10697
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-H4

<400> 10697

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 cacaccaggt gagaaaaaat gtttaaaatt cttataacct agatgaatta agtcgatatt 180
 gaattcttgg tttggaagaa gaatgctggt ccttaattac ctacctgatt atctttccca 240
 tacggatgga gatgacatct ttcctgtaat cgtgctggaa tgcccagtag tggaaaaatg 300
 cccagagtaa ctccgcgatg gtctccttgt tttcagcccc aaaatcacga agctgatgaa 360
 cttcgtcgaa ataagcgcat tcagtgtcat caacaacctat ggtatatgtg ggctccatag 420
 cctgaaaaatg tggggaaatg 440

<210> 10698
 <211> 404
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-020-Q1-E1-H9

<400> 10698

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 ggcacagag gccataatca agcagatccc tcgtctcctt ggccctgggc ttaacaaggc 180
 aggcaagttt cccactctgg ttagtcacca ggaatctctt gaagccaagg tcaacgagac 240
 aaaagctaca gtcaagttcc agctaaagaa ggttctttgc atgggtggtg ctgtgggcaa 300
 cttgtcgatg gacgagaagc agatccaaca aaacatccaa atgagtgtca acttccttgt 360
 gtcnctcctg aagaagaatt ggcagaatgt gaggtgcctg tacg 404

<210> 10699
 <211> 414
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-A12

<400> 10699

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tatggactcg gggctagaga gagcttggtt gagggcgtga atgctgtcac tagtatcctt 180
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agcggggcca aggaagtggc gatgaagctg gcggtaaggt cagatgacc cgaagtcagc 360
gacaagattc atgagattgt tgccagtggg taaaacggat ggcggtcatc gcc 414
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<210> 10700

<211> 293

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-A2

<400> 10700

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tagattacat gatttgttga tgaagataag aaagaagaac tgatggcaaa caaaccgagg 180
aaagtcaccg aagaatgaag gtgggtgcga tgccacatca gaagggattt aagctaaggg 240
tgaattaagg gccatggagc caaccataa gaaggtccaa taaggtgcat aca 293
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<210> 10701

<211> 420

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-A5

<400> 10701

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ccacttccca acatcaatga gctgttcgaa caactcaagg gtgctcaagt attctccaag 120
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cttgatctcc gtatgggtta tcatcagatt cgtattcgtg agcaagatat tcccaagacg 180
gcgttcagaa caagcttttg ttcatatgaa tacaccgtca tgtcttttgg cctcgccaac 240
gctcctccga cgttctctcg catgatgaac ttcattctca acccctacac caatgaattc 300
gttctgggtct atctcgacga cattctgggt ttctcgaaga acaagaaaga tcatgccaa 360
cacttgcggt tggttcttga caagctcagg gaacatcagt tctacgcca gttctccaag 420

<210> 10702
<211> 394
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-021-Q1-E2-A7
<400> 10702

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acagatcaaa aatctcattg aggcagcaga acaagactac gagaaggaaa aactcaacga 120
gaggattgca aagctcgccg gtgggtgtgc tgttattcag gtgggagcac aaacagaaac 180
tgaacttaag gagaagaagt tgagagtga ggatgctcta aacgcaacca aggctgctgt 240
tgaggaaggt attgttgttg gtggagggtg cactcttttg aggctggctg ctaagggtga 300
tgccatcaag gacaccctcg ataacgacga gcagaaggtt ggagctgaga tagtgaggag 360
ggcgctgtgc taccactca agttgatcgc caag 394

<210> 10703
<211> 420
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-021-Q1-E2-B1
<400> 10703

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ttggtcacat gcatgggttt cccggggaac aagaacaaaa cataatctac tgtaaaatgt 180
ttaatttttag tcggcagtgc cgggtgtacgt acgaacgagc agcttgcttg ctgggtccctc 240
cttcccacac caacgcctgc ctgcatgcat gcatgcatgc ccggccaccc gggttttgtg 300

catactacac cgtggaatgt tgctcaaaag attttgatag atcagtgtag gtatatatca 360
agagagtata taacacaaaa ctcgtgcctt tcatattaga aacagtgtag gtatccccgc 420

<210> 10704
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-B3

<400> 10704

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cacgagttgc gataaactgg tgacgaaatg gatggaaacc actgtgtttt caaaaatcgc 180
catcaattaa tggaatctta gcaaccagca ccataagaag tatttgatga ttagatgaca 240
atggtgcaca ctaaggaacc cgtccgtgat gaattcatca attccaaatg tttggaaact 300
accatgcgtt ttcgcccagc acacattgac taatctaaca cacacaggtc aggtggatca 360
actgaatgcc aagtatcgca cattgttaaa aaataatg 398

<210> 10705
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-B4

<400> 10705

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catgtcagcg caagcgttgc tcgagtttgt tgcacttgtc gataggatgc cggatgtggt 180
cctcacataa ggcacagatg acatgattta ctaggctcgg gagagcatgg ggcagttctc 240
tgttagatcc gcatataggg cattcttcgc tggcttgatt gagtcagacg gtgccaccca 300
gatttggaat tcgagagttc caaattcttg gaagttcttc atctggctgg cggtagaagt 360
aggtgttgga cggcggatag agtgcaaaga aggctacttc ctcaccctc gacatgtccc 420
ttc 423

<210> 10706
 <211> 411
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-021-Q1-E2-B5

 <400> 10706

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 ggtgtcatta tcgttaacgg taacattgag cccttgctcc gaactaagga gcacacagcg 180
 gccctggcag ccgaagtcca ggccggcaaa ggggcacgaa aaccaggaa cacatcaagg 240
 tgctagacgc acacaaacga gcctgagcta caacaccgct tcaagagcct tctcgcgctc 300
 accctaaata gggatacgct cccacaaca cggtttctcc agccacgaaa tacgtacctc 360
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<210> 10707
 <211> 456
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-021-Q1-E2-B6

 <400> 10707

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 tcctagtgtc tccactgagc cctggtagct tgctactgct ccggaacact taggctggcc 180
 ggcatgtgtc cttcttcgat cctgtgtctg tcccttcgtg gaaatgtcac gcgatgaata 240
 ccggagtcct gttagcctgc tacagcccg gttaccggag tccagttagc ccagtgtctac 300
 agcctggatt cactcgctga tgaccgacac gtctgatgct gggtcattga tgctgtccc 360
 tgtaggttag tgccactttg ggtttacaac tagccatgtc agcccggtc ctttatcata 420
 tggatgctag cgacaccatc atatacgtgt gccaaa 456

<210> 10708
 <211> 396
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-B8

<400> 10708

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gatccagcac  gtggaccaa gaccattccg cagattcccg gtggttcatg gctatggcca  120
ctcgtagaca actgcacatc tatacctgac gttcccacgt acgctagtgt gcaaatacata  180
ttctctacgt tccagatgca atggtgactg cggggagctg gtacacacgg cacagcatag  240
catgatacgg gaaaggcctg cacgatctga acagctaact gctgcctgta tcactagtat  300
acacgctgac cataacctgt gtcgcctgca tccgcattccc caacttcagc atcctctaca  360
ggctggacaa tggctccttc attgaccacc tcccaa                               396
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<210> 10709

<211> 384

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-B9

<400> 10709

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tgcttgatct tgtggactct gcactcctgg atgttaaccg tgaacaagcg ctgctatgcc  180
tcactgtcgc actcctgtgt atccataagt ctccaatccg tcgcccacaa agccacgagg  240
cacttgaaaa gctctctggt gaaggtgaac caccatatct ccctgtacaa ttctcaacgt  300
cgctcctggt tgggttcccc ttcagatccc tcacgaaatg cctctgagtt cactttgttg  360
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<210> 10710

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-C1

<400> 10710

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cagtgggttc atggcgttta acgtgccgcc ccttcgcggc ccgctctgga tacttggaga 180
cgtcttcatg ggcgcctatc acaccgtttt cgacttcggt gagagcagga ttgggttcgc 240
caaatccgcy tgatttggtg atcccagtat ctccagtgt tcaaggctca aggccggtat 300
tgtacataat ccaagcacgt gtaagttgcc aggtcaacaa gaaatttatc agtagaaaag 360
gaacaaaatg aacttgccat cggcatttca catttgtata gctatttgct gtg 413

<210> 10711
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-C10

<400> 10711

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ttttctcacc tattgtccaa gaaaaagcca caaaaaaagc tagatctatt catcctttgt 180
ccaagctagt ctgagccttt gcaattttct tttcattgct tgcatagttg aattatcggt 240
tgcategtcg tgcgagttg ctggctcttag tgtcttggtc gtttagagtt tcgagttctg 300
ttcacattag tcacgccgcc gctgcatcgt tatccctttc gctgtccacc acccattcat 360
caatttccac cagtgctac ccatcattca ttgtctaaat gatagttgag gtcgttcaca 420
tc 422

<210> 10712
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-C11

<400> 10712

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actgcaccac ttaagactct gcaacctgat gatgattcag atgatgatca taagccactt 180
gttcagaggt tcaaccagc aaaaggggct tccaataata gcacaagtaa gcccgtttta 240
tttaaggctg cacctaagat tgtgcaatct gatgatgatt cagaggatga gaaaccactt 300
gccagcaggt taccactaa tgctgctcca aaaagtagag ctagcacctc tgattcagag 360
gatgagaagc cactgtctgc ccgattttca agaggctactg cagggtacatc tgcgagtat 419

<210> 10713
<211> 354
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-C2

<400> 10713

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cactacaaca acaacacaca tctaagtttc tctttctaata ctataaggca cccccgatg 180
tcaccttaag tagtcccaaa aggcatacta cacaatcacc tcatgatctt tategttcta 240
atctcaatcc acaagtcac ccatggccac tatattctcc aaaattatac tacatatgaa 300
tcacataatt cattgattcc ctaaaacaaa cacataccgt tcacaaaaaa tcgg 354

<210> 10714
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-C3

<400> 10714

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cccgcttttg cgcgggagag gatagctggc tggcaagatg cagtaccaat gactcaagta 180
catccgaagt tagggatgga aacaggaaac cgcgacgcag cacggacgaa tgtcggacca 240
agggcagcat cccgaagagc acggcagtca acgccggatt taaaagctca cagcataatc 300
atagaaaact gcccctaag gataacaggg aggagctatc taacttaaac aaaatcttgc 360

acaaggtatg ccaaatccac agtacccccg ggaagcccg aaatcatacc cacaaag 417

<210> 10715
 <211> 423
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-021-Q1-E2-C5
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 aattccaaat gtccgaaact ggagtattga gggagtaatt tcttatgcaa aaattcaaga 180
 taaaaagccg atggagcaaa agcacgttga aaaaagaaag gctttcttaa agttacaggc 240
 taatacggca ttcaagcaga aggagtataa gttggcatca cagttgtatg gtttggcaat 300
 agatcatgca gagagtgcag cactgtatgc aaacaggagt gtttgtaaac tgctcatggg 360
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 caa 423

<210> 10716
 <211> 390
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-021-Q1-E2-C9
 <400> 10716

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 agccaccatt ctgaggtag atggacaggg tcatatgcca tcttcacctt gtcacgtagg 180
 catcttcaca tgtcaccagt ctaccggata taccttcccc ataatgccag tccacactct 240
 ctccgttcta gttaactagg ctattatatg tgttgatgatt taatgagaga gctttattca 300
 tatatttatc attctcttgt gacaatctac aaaaagact ggtcactcac gcgtcgaagt 360
 actcctcagc aaacaaaatc cttgaatgca 390

<210> 10717

<211> 414
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-021-Q1-E2-D1

 <400> 10717

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 agttcttcag ggaatcaagc gacgaggaga ggggacacgc cgagaagtta atggagtacc 180
 agaacaaacg tggagggagg gtgaggctcc agtcaattgt cacaccctta accgagttcg 240
 accatgctga gaaaggcgat gtcctgtatg caatggagtt ggctctagct cttgaaaagc 300
 tggatgaatga gaaactgcac aacctgcaca gtgtagctac aaggtgcaat gatcctcagc 360
 tgaccgactt tgttgagagt gaattccttc aggagcaggt tgacgccatc aaga 414

<210> 10718
 <211> 354
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-021-Q1-E2-D10

 <400> 10718

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 aacagaggca gtcgagcaca tggatcatct ttgattcttt tcattccaca ttagatcagg 180
 gttctggctg aaaatcagtt gagacagatc agcgacatct acagatcaga tttgccgtca 240
 gttgctcagg tcttatcatg ccacaattcg tcaagttatc agaactatag ttcgacaaga 300
 tacacacttc acatcagata gactgactta tatgcatagt ccaccttttg acaa 354

<210> 10719
 <211> 433
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-021-Q1-E2-D11

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 gaagtatgac ttagccggac ttggcggctc actagtgacc cgccctggct tggccactca 180
 ctagtgaccc ggccgagcct agcgactcat gggatgaacc gcaggcgggt cagatgaatg 240
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 tgggcccggc tgagatggaa gacataagga atatttcctt tacaaggga cctggactag 360
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 tcaacttata taa 433

<210> 10720
 <211> 437
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-021-Q1-E2-D12
 <400> 10720

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 ttccaagcc cacctcaccg gatggatcta cgcttggtac atcgtgccac ttgtgcctgc 180
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 aagtcggagc atgatttatt tattgattgt cttccttatg agtggcggtc ggggacgagc 360
 gatggtcttt tcctaccaat ctatccccct aggagcatgc gcgtaatact ttgctttgat 420
 aactttaga tttttgc 437

<210> 10721
 <211> 424
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-021-Q1-E2-D2
 <400> 10721

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 tttcccgagt aagtcctccc ctcaaccggc ccgtaacata tgaattctta catttcgatc 180
 gtttttcttt taacattccg tgttttctgc actgacacac gttgcacgct catcctccta 240
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 acaaatgtca agaaggttct tgatgatggt ctccccgggt acgccaatc tggaggcacc 360
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 tgcg 424

<210> 10722
 <211> 456
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-021-Q1-E2-D3

<400> 10722

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 ccgtcttggt ctcatgatat caagcaagtt aagtatgtgt gattcgctat tagatatggc 180
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<210> 10723
 <211> 418
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-D4

<400> 10723

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cctgtggttg aatgattgcg atcatgtcgc atcataaatg tcactcacat acgctaccgg 180
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 tatctgttcc caccttgaag tttatgtcac cagtatttat taacgacatg gtatcgatgc 300
 tgctatcgat gagacagcta tttgtcttta catgctttca acactttcaa ataattgagt 360
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<210> 10724
 <211> 414
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-D5

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 ccacgactgc ttttaaggttt gattgagccc atttcgattg tcggtgaacc ctgacccta 180
 agcgactgga acttgtaacct gctagcgttg ttctgtatgc agtggcttgg ttgcctttcg 240
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 gtttgcatte agacagactt agtcaagaag atgcatgcaa tgctactaat tttcaattgt 360
 ccaaagtgac atgtcggatg ctctcaggtg caaatgctg cgacctgaat ggtc 414

<210> 10725
 <211> 309
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-D6

<400> 10725

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 gtgcgcttgc gcaagtcaat gatgtcaaga acacttgact acttcattca cagagtcac 180
 tgttacaaga gttcgaacgt ttctctctgc aggcttcac gacattggcg tgatgtccaa 240
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tgcccacag

309

<210> 10726
<211> 331
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-D9

<400> 10726

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gacaatgacc gtattaatcc gctaggagtc atcgaccttg tggtcacagc aaccactatg 180
ctacaccaca tcagagaaca cctgctgtac aacttaagca tatgctagac ttgctacccc 240
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atcataggta tagtctccaa catccatctt g 331

<210> 10727
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-E11

<400> 10727

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tcagtttctt cccattcaag gtcaccgtca aaggaacgct ctccatcaag atcaccagca 180
aaatcccaat cccctgtcgc tgcattctcc gtcgtcaatg gtgaagcagc aagccccaag 240
agggacccaa gcaagagccc atcacgttcc cggctctcctg atgccaatc agagtaaaac 300
tgatgcgagg ttaggggagg tgagaggcgg agccatgggc ttcaaattct tcatattttg 360
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cttgatgttt ctgtaaaact tggt 444

<210> 10728
<211> 303

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-021-Q1-E2-E12
 <400> 10728
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 acaaaaaaat ccaaacttaa aatatgaatc aacacaaaat catacctctt ctataaatatc 180
 accaaaattc aaatcaatgg acgtcatttt acaacttcgt tatcagaaaa acccttcagt 240
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 ggc 303

<210> 10729
 <211> 408
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-021-Q1-E2-E2
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 agcccaaggt gtgcctgatg agcatgaaag aatcatatgg gataggaaaa tttgtgttgc 180
 agctaacctt catgggttaat gagatgagc atattggata aaagatgcag gtaaacatag 240
 ttgtggaaaa gttactatgg gttgttcctg acaaatgtct accaatcttt ggcaccatag 300
 agtagtggag cgatgtgagg aagatgtcga cgatggagg gattgggtgg ctgatgacct 360
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<210> 10730
 <211> 306
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-021-Q1-E2-E3
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 acaactgcgt ggttgcgcta tgctgcctgg acaattgctt gcatacaccg acaagttgca 240
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 gccgct 306

<210> 10731
 <211> 418
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-021-Q1-E2-E4
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 aggggtgatta tcatcacaag tgtgtccatt accaacagca tggaatcaac aacatgcacc 240
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 tgtatcaacg atcacaccat aaatattatg ccgggggttca gaatgcttgc cttcaatgtg 360
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<210> 10732
 <211> 442
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-021-Q1-E2-E6
 <400> 10732

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 ctctagacag gtgcaatctt cgtcttctcc tccagttgcg ggaaatcca tgaatacttt 180
 tagcttcttc ttcagaccat cgtccttctc cactagtgtg gctatttcct cctcatatcc 240
 atcgcgtgta gacttgagtt cttcctccag ctccatgac ttgggtcatgg ctttcttttag 300

atctatcatg cctgcacaca tctggttctc ctggcgctga atgtgctggt ttaactcctg 360
gatgaaagct gcaattgatc tatccttcct ggtgttgatc atctcccatt gctcatctcg 420
gctcccacaa atctggtaga ta 442

<210> 10733
<211> 421
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-021-Q1-E2-E8
<400> 10733

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cttactttct gccctcggat tcagaagagt actgtgtggt ggaacaccaa ggttgcatga 180
gctgatcaag ttgacagcat caggtgacaa gaagtctaac attaaaagcc ttttattgga 240
tattgatttt cggatttcac agttttatat ggaagatagc ttttgccatt ataatatggt 300
taaccatcat ttctttgatg gaaagactgc ccttgaagta tgcagagcat ttttacagga 360
agataaaggc gaaggaatca ttatggtgac ggatcctccg tttggtggct tggttgaacc 420
t 421

<210> 10734
<211> 437
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-021-Q1-E2-E9
<400> 10734

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ttgactcaac catatggtat cagaattcca aattgcgcgg tgagaattca cactacatca 120
acgactttat caaatctgct ctacgagaca actgtccaat aacacgtgac caaattatta 180
gaggaagagc accaccttag tacaatatcg gatacattac acaatcttaa tatggcttca 240
gcttagacaa gttaggtcac taaagctggt ttcaagtatc tggctctggca tgtgaatcac 300
atacagtaat tcattctggt gacaaaatta ccctgctcaa ccgaattacc cacaccacat 360

tgcaaaactca ccacaatgcg tacacttttaa cgctaagcaa ctatatctac aaaacaagag 420
tcgtcagtag ccactga 437

<210> 10735
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-F1

<400> 10735

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ggccataatc aagcagatcc ctctgtctcct tggccctgggt cttacaagg caggcaagtt 180
tcccactctg gttagtcacc aggaatctct tgaagccaag gtcaacgaga caaaagctac 240
agtcaagttc cagctaaaga aggttctttg catgggtggt gctgtaggca acttgctgat 300
ggacgagaag cagatccaac aaaacatcca aatgagcgtc aacttccttg tgccctcct 360
gaagaagaat tggcagaatg tgaggtgcct gtacgtgaag agcaccatgg ggaagcctgt 420
acgtgtgttc 430

<210> 10736
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-F11

<400> 10736

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ctataaataa ataaagtagt acttactaaa acaaaactac tatatatagt aaaataaagt 180
agtttattaa atcaactagc tagttcaact atatatgaag cacttactat aaataaaata 240
aagtagaatt actagaaata aactagtatt tttctaacta attagattaa acactttctc 300
ttcttatttt tttcattttt ctaaatacgt actatgaaca aaagaaacat taaaaatcca 360
taaacaaaat tacaacagaa aaaaatcata aagattctat gaacaggaaa tctatgaaat 420

acaca

425

<210> 10737
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-F12

<400> 10737

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gatttgactg gtgatctttt taacactctt gaacatcaca gggatctcat cagggatctt 180
aacacgtcat ccaacttaac tccgagcaga tgccaaacct ttaaggacgc cacgaaataa 240
ggagttatga ttccaagtga tattgatgtt acatttgaga attttcccta ccagcttagc 300
gagaatacga agaatgtgct cttatcatgt gcaatcttac atttgcacaa gaaagaattc 360
attatgcagt tctccgaaat ttcatacta aatcagcgaa ttttattagc cgggccatca 420
ggttcagaga tttatc 436

<210> 10738
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-F4

<400> 10738

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tacatgtacc cactcggttg aggatcgaca acaccttttt ttacttgtcc agcagctcgc 180
atgatctgga gagcaaccgg catctgccct ctttactctc ctatcacaag tctcttcagc 240
acgaagcttc cggatccgct gcctatcaca gtccgccctt tcatgctcct tttgattctt 300
tggaaaatct gggacgcacg caacacgaaa gttttccaag gactagatgt tgtggcctca 360
aactccttga gagctatcct ggatgatttg agtgtttggc ctcatacact agaactcg 418

<210> 10739
 <211> 381
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-F5

<400> 10739

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 ctgcctcata actcggtagc tggacctgcc tacttcacca cgccaccaga taggtcgcac 120
 cctcatccca aatcactttg tttacgcgtc cgttgtctgc atttttattc tggggcaatc 180
 gattcccact gggaaccagc accccttgag gcaccggagc tcctatgctg ccggttggtc 240
 ggtgtctaac gtacggggga tgggccgcaa cttcgtcgcg gaatcagcac ttatatggct 300
 atattacagt tgcgtaggtt ggaggtactg ccgccgccgg atctagataa cgacgagtc 360
 ttgtgaattg gcccgggggc g 381

<210> 10740
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-F6

<400> 10740

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 caacggttct acgtcccctc tccgatcagc tctttcatgg gacaggcaat tgaaggatatg 180
 gactacaaca gtacagactg ttatatatct ggaaggcgaa attttggggc ggtacctgct 240
 tattgaatga cagacagtta tataagagag aatattccta ggtttgccat gacatacaag 300
 atggtggcaa ggccttgctc gtttttagagg acatgggata catacaggaa gcagctgaaa 360
 ttgatgttg caagtctggt atttacaata aatctcatga agtcattcaa catacgtgtg 420
 cgaacaaaca atttgtcttc ctgga 445

<210> 10741
 <211> 397
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-F7

<400> 10741

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tacagccggg tcgagaccgg aagatgacgt gcatgtagta gtgtaagcaa gcctcgactg 120
cccgtactgc agacgcaagt gcgtcacatg tgggatctat atgtgccaat aagacgtcag 180
gctggtcgta cgatagtac agacacaact caaccatccg tgcgctcac gattcgtcac 240
gttgatggga aacgttgata caaagcgtgc ttcacgagct ttgcactagc tcggccactc 300
cttccgcacg gtcactctga aggcacagtg cagacgcagt cgcagcagtg gttggctgat 360
atctcaccac tccctgtgat ggaagtagtc gtacctg 397

<210> 10742

<211> 451

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-021-Q1-E2-F8

<400> 10742

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cagaaaatag tcttgataac ccacaagtat aggggatcgc aacagttttc gagggtagag 120
tattcaacc aaatttattg attcgacaca aggggagcca aagaatattc tcaagtatta 180
gcagctgagt tttcaattca accacacctg aaagacttaa tatctgaaga aaagtactta 240
gtagcaaagt agtatggaag taacggtaac ggtggcaaaa gtaacagtag catttttgta 300
gcaatcgtaa cagtggcaac ggaaaggtaa ctaagaaaag atcaatatgt gaaaagctca 360
taggcaatgg atcaatgatg gataataatg tcagatgtga ttcctcatga aacagttata 420
acatangtg acacagaatt agctccaatt c 451

<210> 10743

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-G1

<400> 10743

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caacatcgtc tgcaagaagg ccgacatcga catgaacaag agggccggag agctttccgc 120
ggaggagatg gaccgcctga tggcggtggt gcacaacccg cgccagttca aggtgccgga 180
ctggttcttc aacagaaaga aggactacaa ggacgggagg ttctcccagg tcgtgtccaa 240
cgccgtggac atgaagctca gggatgacct tgagaggctc aagaagatca ggaaccatcg 300
tggtctcgct cactactggg gtgtgcgtgt ccgcggtcag cacaccaaga ctaccggcag 360
gagaggaaag actgttggtg tctccaagaa gcgataagct gc 402

<210> 10744

<211> 441

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-G11

<400> 10744

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agtgttagta tgtgagattc actaaatcgc atacaaagta atgttttgag tgccggatgg 120
attggtcacc ataccgactt actcatacta ttcgctttgc tatatgggat ggaaaatctg 180
agtgacttac ctatattaca gagacaatga tcaagtcctt gttcagaccg tagaatggta 240
ccataacatt tcccttgtag actgcagctg ttgccaactc gtaggacata ctgtgaggtt 300
cactgcacac ccattttcct gcatgagaca ccatagcttg ttgactacca tgagatatct 360
atacttgttt agtattgcga gcagaatcat cagttcagaa catacagtct cgggataacc 420
gtaccattat gagaagacat g 441

<210> 10745

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-G12

<400> 10745

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cegtgttcac ttcccgaact ctgctgaaaa gagaccatca cggctacaca cgcgggttgat 120
 gcgtttttatt tcagtcaagt gtcaagttct ctacaatcgg atattaacga attcccatct 180
 gccacataac cgcgggcacg gctctcgaaa gtttaaacc tacaggggtg tcccaactta 240
 gcacatcata agctctcacg gtcaacgaag gatacttctt ctcccaggaa gaccgatca 300
 gtctcggaat cccggtttac aagacatddd gacaatggta aaacaagacc agcaaagatg 360
 cccgatgtgc cgacaaatcc cgacaggagc tggacatata tcgtttctcaa ggcacaccgg 420
 atgaacacta tgttcaa 437

<210> 10746
 <211> 420
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-021-Q1-E2-G2
 <400> 10746

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 ttgatgcgtt cctgctagcc tatttggttag ctgccgctgc tgatctttta gtcattgcat 180
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 gtgttttctc atgtcatgtg agtccaccat acctatgtct gtcagccttt ttctggatcat 300
 tgtcctctct ataggatttc tgtggcctct ctttgcatg ttgatctaag cccattccct 360
 tgccgccgag cttctttcgc cgttggtttt catgggccat gattcttttag gcaatgcttt 420

<210> 10747
 <211> 444
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-021-Q1-E2-G3
 <400> 10747

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 tggatcaga tttccaggtt gctcgggtgag atttttacag tttttcgtag tttagatcga 120
 gtctgttctt catacctaca atccacaaaa aagccaaaaa aattagggtt agttcatcat 180

atctgaacca atctgagcct ttgcatagtc ttttttagagt ttgcttttgt tgaatttgcg 240
gttgcatcgt cgtgtcaggt tgctgggtctt agcgtctagt cccttagagt ttcgagttct 300
gttcacaggt tgtcacgccg ccgccacacc atcgtcatca tcattgcctt atactaccac 360
cccaccatat acatcgccgc tgccatatac aaccaccaat ccgagtccac atataacatc 420
gccatataca accaccaatc cgag 444

<210> 10748
<211> 395
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-021-Q1-E2-G4
<400> 10748

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caccgggatg ttagagatgt ggccacagtc gttttgtgcg agagagtgtg aagagagcaa 120
ccccagcaag caaccgtgta ggatggcccc tcctgactat gtatatagtg gagcggtttc 180
cttttctctc catatgaacc tatcatattg cgtacgtgcc actgaagaaa aataataatt 240
tataaatgac gcgacaccta ctactcgttc tcctataacc ttgcgcttgg catctccaaa 300
atattaacct tgtgattggc tcttcgcctc ttcgggaagt cgagcaataa tggtagtgca 360
gtatatatcg ttctggctat atgagaccga atgaa 395

<210> 10749
<211> 362
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-021-Q1-E2-G7
<400> 10749

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cgggcagtga ccagtagcat aaaacaattt acatcttagg tttcacctga catcgcatcg 120
aacacctaca attctgcaga taaatatgac ataccggcgt cggcagtggt tcatgaagaa 180
tctaacgtat gtatcacaca cttaattgac aacataacac ttgatttgac atcagttcac 240
gccattgagg atgatgtggg cccacctaag taacgatatg gcctgacgaa ctcgattaca 300

agttcggatt gacgatgaca gtgctcctag gtccgtatct atagaacata ccagattgtg 360
ga 362

<210> 10750
<211> 212
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-G9

<400> 10750

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tgaaggcaag tttcggtaat acataagccc ttactagtta agtataatta ccacaggctcg 120
aatcttgat aggcacacaa tcatcaaacy gtggatatctg agcatgagtg aaaacagaaa 180
aggacaacat tgacgcttaa ttctgcatga tc 212

<210> 10751
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-H1

<400> 10751

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atcatgataa atgtttatta tttactctag aattgtatta aacggaaact tattccatgt 120
gtgaggacat acacatacac agtgtcactt gtatgcctct acctgactag ctcggtgatc 180
accgatggtt aagtttaaga tccatggata tagagtttcc atttgaacaa cagggtcata 240
tcattataga atgatgttat tgacttgaac caaccgtaag cttatcacta tgattgttta 300
atttactgct attgctttct ccataacata tacatgttcg tatgactatg agattatgct 360
cctcctgaat attggaggaa cacatagtgt gctatcaaac gtcagaacg 409

<210> 10752
<211> 263
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-H10

<400> 10752

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attcgggact acgaggggaa tgatatcttc actgtgctca agattcccat ggatgtctcc 120
cactgtcgcg cgttgttgca tcttccatcg tggatattca tcgaacgacg tgttcaattg 180
ggtcgtcatg gcatctaaca gatattgaga gctctatggg ctaagccaca tcgtttacat 240
gctgatgtat tgcgtgctcg tgt 263

<210> 10753

<211> 215

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-H12

<400> 10753

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ttccttgtagc atatctcttg catctttaat atcatacata tcagcattac catacattca 120
gtgagtccag tcatgaactc aatcattcaa cgtgtcgttc tctcggtcgg tagcatccta 180
tttaggcgca tgcttttcga cagcgaaca taaaa 215

<210> 10754

<211> 371

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-H2

<400> 10754

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tgcattatat cgactatacg gggggatgaat acgcgatttt tatgaattcg tcatgagga 120
atttgccagt gaggaacttc cttagcgaac aactacttgt aacagaataa gtacgtatac 180
gtaagcatat cacagtacag acatagtcac catgatgaat tggacacaag catagcgtac 240
acaaagcgta atcatatgat aacacacgat gaagacaaac atactgacga aattgaacta 300
acgaaattga gaaagtcac agtcagagtc gtcaaacata gatatgaaca atcagtcac 360
acagttatga g 371

<210> 10755
 <211> 413
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-021-Q1-E2-H3

 <400> 10755

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 cacaagcact ggaccaccct gcctctgacc atgaggcaca tcgagtacgc ggcaaaggac 180
 gcctacgcag cgtacgagat gtggagccgc atcacccctca cccaggacgg gcttcgccgt 240
 gcaaagctgg agaaggagga gcccgaagaa gcgcgccagg agtagccaag gagactctaa 300
 ttggtgaaga agcagacggt gccggccaag agccaacatt gctcgcgtca ttttagattt 360
 atcatcaaat ttgttttttt gtttgcttat gtaacgttag tttgcctgtg atc 413

<210> 10756
 <211> 388
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-021-Q1-E2-H4

 <400> 10756

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 caaactctgt tgctccatgg tacataacga cttcgcttac agaaggactt ttggctaaca 180
 aggaatttga ggccctccgtt gtgagtcgaa ctccactggg gcgtgtcgga gaaccaggag 240
 aggtatcatc gctggttgct tttctttgca tgcctggttc cacttacata acaggccaga 300
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 aggaagaggc atatttcgct ttgttgcc 388

<210> 10757
 <211> 353
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-H5

<400> 10757

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gggtcatgtg ctcagcgggc agatagaccc agtgcattgt ttgagtgcag atcggtatgga 180
ggtcaagaat gtgtcacatt gccacacaat gtttctgacg tctcgtgaat tccacaatgc 240
gatgaatgaa cgtgagctgt cttcactgac agctgtgctc aagtgcgtca aggagcaaatt 300
cctggctgag caatatctgg tggaccacaca tcagtaaatt ctgattcagc tgg 353

<210> 10758

<211> 398

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-H6

<400> 10758

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gggagctttt tctgtcaggg ctgggttatga ggtccgatag gcgcttcgac ttaagctctg 180
catggaatag tcgtcttagc accttctcgc agtgggtcat ctgttagctt gggtcgccgt 240
tccgttcacg gagatctgtc ttcttctcga tctgtgcac aggtttcacc ttccacatcc 300
acctctcatt tctggtcagt tccgtactct tccctcacgt caccacgtta gcctccactc 360
gcatcacgat tatcaggctg ctcatgttct ccatcccc 398

<210> 10759

<211> 407

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-H8

<400> 10759

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caacgtaggc ctcgtaattc caggggatcg tcactcttca caggttccta aacatggatt 120

ccaatttcgt ccgaggtaaa tgcattgcaca tcattggtac aggatcgaca taatacattt 180
catctagcgt atgacgtctg tggtggccta gctgactaac tgtatctggc ctgtaacata 240
gcgttcacaa attgatgagc agcgtactgc tttatgactc acattgacgt ctataggatt 300
gataacatgt atcctacagc attattacca gtcattcagc agtaaggcca aggtgattgc 360
ttgttcattc ctatgcattt atctatcact ctctcagcaa gcttgtc 407

<210> 10760
<211> 141
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-021-Q1-E2-H9
<400> 10760

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cgtaaaggca gctcacacac attaggcgctc gctctagctc attggctcgc tctcggtcca 120
tggcggctctt gtgcctcact g 141

<210> 10761
<211> 121
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-022-Q1-E1-A3
<400> 10761

tccttcacca atcaatgatc acattaattg cagcctaacc gcatggctat ctcccgggca 60
gtccagccc ctgctgcgaa ggacctgaca tcaagtcatg agtcatttgg ttgtcaattt 120
g 121

<210> 10762
<211> 424
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-022-Q1-E1-A4
<400> 10762

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ggctcttttag tgaaatgggc ttcctgaact gtcgccgtgt gaatatgctc caagaacaca 120
 ttgctgggaa tggtttctct cttggaacct atctttgcca attcatcggc tgcttgattt 180
 ttcagttggg ggacgtgggtg gagttctaac ccctcgaact ttttctcaag ctttctcacc 240
 gcgttgagcgt aaccagtcac ggctgtactt ctgacgtctc actcctttat cacttgatta 300
 actaccaaact ctgagtcgcc atagaccatg aggcgacgaa cgccgagtga gatggccatg 360
 cgcaacctat acagaagtgc ttcagagtga atctggaaga catatctgag cttgtctcct 420
 cggt 424

<210> 10763
 <211> 421
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-A5

<400> 10763

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 tccaagccca gaacaagcct ggaaaattga actgtataat aattttgcaa tagacgggaa 120
 gcttggtgta aactatgctt tatcggcagc gtgggggttaa aagattggat ttgctggaag 180
 aagcgaatgg atggaaaacg ccgtttgaaa tttgaccggt ttacgtgtat agctgggggtt 240
 gtaattggtc agtcaaagag gcactagctc tcacatatgt tgatgatgaa agtaaagggtt 300
 cttgcgaaac tgccttttct ggcattgaac tgtccaagtg ttctctctct ctacagtatg 360
 tttagtgggtt cttgattcat gtcgtgtgtg tgattggggc tagagaaaac gatggatttt 420
 t 421

<210> 10764
 <211> 344
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-A7

<400> 10764

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 ggctcgggag cttcctcaag gttgggaaca cctgccccaa ctggaaaaag gccttgaagt 120

gttgtggaag aagacctttg tgcggcctta cgtcgaacag cacgggaacc ggtcgcagtc 180
 gtgtcggagt tgagatctcc ggtggcttgc gcaggggaagc tatcgcgcgc cgtttcgtaa 240
 gtagaacatc tctgaaaaag ggtttagtcg tataagttga tttgtgtgag gcttgagaat 300
 atgtttgtgc gctgtgcttt gtgggtgcttc ttcgggtctt cgcc 344

<210> 10765
 <211> 425
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-A9
 <400> 10765

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 agtcgcgagt tcttacctcg aaggcatcat tctggcaaac caagataagg ataacttctt 120
 cgtgccttac tttcccgagt aagtcctccc ctcaaccggc ccgtaacata tgaattctta 180
 gatttcgatc gttgttcttt taacattccg tgttttctgc agtgacacac attgcacgct 240
 catcctccta agccccaat attccatggc cacgtatttc gaccocggacc gtcagtcgaa 300
 cgtagactac acaaagtca agaaggttct tgatgatgtt ctccccggct acgccaatc 360
 tggaggcacc ttcaccaggc ctattcgtaa gtacggcaag cacatgttct ccacacaatac 420
 gacgt 425

<210> 10766
 <211> 445
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-B1
 <400> 10766

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 tagtttagat cgagtctgtt cttcatacct acagtccacg aaaaagccac aaaaaaaat 180
 tagggtagt tcatcatatc cgaaccaatc tgagcctttg cataatcttt ttagggtttt 240
 tgctttgttg aatttgcggt tgcacgtcgc tgtcaagttg ctggtcttag agtctagtct 300

tttagagttt cgagttcttg tcataagttg tcacgcccgt gccgcacat catcatcgcc 360
 ttgccatcta ccaccattgc ttatccgcca ccgctttgaa cccgtatcca tataaccacca 420
 ccgctgccat atactaccgc catat 445

<210> 10767
 <211> 425
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-B3
 <400> 10767

gacatgcgac tccacacgat gaccatgtat ggatgttggt tccatggggt cttcttggtc 60
 ttccggcgttt tccaaagat cattgtctcc tgtgccggtt ttgctgtcct ttccgcgacg 120
 cgatttatag cggcgccgat tacatctaag ccttggtggt atcccaagag ggttggcccc 180
 ctccgggaca atcttaatca tctacgtcgc aatccttaag tgtgtccacc atctataaaa 240
 cgcattgatga agttgccgtc caacgtccgg taaatggtgg gttttgggcc tgcctctctc 300
 tggcatcgtc gtccatacca tcgatgtctt cagaggcgta gtgaaacatg tcagtttagat 360
 cctcgacagt gggatatgaag ttggggcggg ttggaagtaa aattccctat tttcaacccc 420
 taatc 425

<210> 10768
 <211> 221
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-B7
 <400> 10768

ggcaccatag tcagtcgtat caccgacgat gaagagtaac taaggtaata cgtagatgta 60
 gtacgtagga tttcttttgc atgctttgca tgaatctagc agataaaata tgagagaggc 120
 gaatgcaaag tgactaattt aagaaatgcc tagtcaatgc acacatccac ggacgtttga 180
 ggggatttgc caagtccgaa ggtagatgac tgttttttta t 221

<210> 10769
 <211> 410

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-022-Q1-E1-B9

 <400> 10769

 ctgcggggtc gacattagac ccaacattga gtcgctctag cagcctcggt ctagttgttt 60
 atgggtagtg cgagccctac agatgatact acagacttgt tatgatgctg ttttggtcct 120
 gagctccggc tccgtttggt caatggaatt tgttcaatga gccctgtgga tggggcacgt 180
 cgccaagttc gcttatagac gatgaatgtc cgggtgtaaag tgtatatgat tgggccgtta 240
 ttggtggatt accaatacga tggtttcatt ttttttatgt cgttgcagga ttcaatgaat 300
 ccatttttgt ccgtacgaat tgttgaacat cgttcatgca tgtcactgta tggtttgaca 360
 taggctggtg aactaaactt tgcctgcac tgaacatcac gtacatcgac 410

<210> 10770
 <211> 359
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-022-Q1-E1-C3

 <400> 10770

 cctggtggag cgcgacctca tcttgaacca gatgcacagg ctgacggcga ccatcgcccc 60
 tatgcccacg gcgacaccaa cgctgacgac cagcccgagc acagaagcca cgccgacgcc 120
 gagcccgact acacccacgc cgaccccgac cagtctcacg gcagaggagc ttgccgtttg 180
 atgtgttcca tgtctatgat tccttccttt ttgatcgctg aacttttggg tgtgtttgat 240
 tgccgaacta tggcatgatg atcgctgact tgtggcatga tgatcgccga acttttggcc 300
 ttttttggca gcaggaaaga caagtttgaa tttttgggcg tctgggggcg aaatctggg 359

<210> 10771
 <211> 316
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-022-Q1-E1-C4

 <400> 10771

 gggacgacag tgtaccccaa attgcctcgt atgaactgat ggccaagggt gtagctttcg 60

atctgctcca catggccaag caaattggcc cgcagtgcga agccgccgaa tacgaagatc 120
 tgtccaggga ggaaagcctc gccctggacc gcatcgctag cgatgatcga aggagacatc 180
 aagccttatg atgacgacac agaggaactc tcaatgaaag caccaatgtc ggtgtcgaaa 240
 ccggcgatc tcgggtaggg ggtcccgaaac tgtgcgtcta aagcggatgg taacaggagg 300
 caaaggagac catggt 316

<210> 10772
 <211> 394
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-C7

<400> 10772

gaggggagag agagagcaca catggaaccc accagtaagt gaaggcgaat agtactaaac 60
 ataatattac atgttatcca ttaattaggc tgtggtaata taaaaacatt atgtgaacaa 120
 agggggtaca acaaacattg ctattctacg tatgttgctt attgacgtgc ggcttgaagg 180
 cccggtcgca tgttcgatcc tcgtccttta ttttttaatt tgtatatggg tccaaatttg 240
 tttcatgaca tgtgggcccc tcgggtgtgta gttttagca ctttaatttg tgggtcgaaa 300
 tttgtttcat tccaagtgga ctatcgggtg tagttttgt agcttattta taataattaa 360
 agagaacaac atagtttttt caataatacc atgg 394

<210> 10773
 <211> 421
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-D10

<400> 10773

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 cagcgctcgt cacgtgcggg agcacagttg gacattggag tccgtcgcaa ggatgtgagg 120
 gcgtggagca gggtcagtcg tgtgcggcag cgaccgatta tctatttttc cctcggtcga 180
 tcataggcat tcaatctggc gtcctgact tctaaacaca gcagaagtct aaatcagatc 240
 gaaacattat catggaagaa attacaaagc tgtcctcgag ccaaatactaa cccgaataat 300

atcaatcggtt ggatgaactt aatactaccc attacatccg gtagtatgat gtaccgtaaa 360
 atatctcgac atgacatagt ttgttttgtg gttgcttacc acatacatca tgtgaaactc 420
 t 421

<210> 10774
 <211> 412
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-D11

<400> 10774

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 atttgaagca tggggtgttc tttagagtgt tttgttatga gtggcggtcg gggacgagcg 120
 atggtctttt cctaccaatc tatccctcta ggggcatgca tagtagtact tttcttcgag 180
 ggctaataaa cttttgcaat aagtatatga gttctttatg actaatgtga gtccatggat 240
 catacgact ctcacctttc cgcaatttgc tagcctctac ggtaccgtgc attgcccttt 300
 ctcacctcga gagttggtgc aaacttcgtc ggtgcatcca aaccccgatga tacgatacgc 360
 tctatcacac acaggcctcc ttatatcttc ctcaaaacag ccaccatacc ta 412

<210> 10775
 <211> 426
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-D12

<400> 10775

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 ccggagtttg aattaccatg gcggatggca agtcacagaa tgcaacgtta tgcatacgag 120
 cataattttc agatatacaa gaatgtgagg ctctgtatc gaaaagaaca gatgccgggt 180
 gtcaattaac aagaagcgta ccgagaacga cgttgggatc atcttgagct tcttcggcag 240
 agatacagtt gacatggcca cgtgaagcgg tgaccggttt agcgtggaac acttttcctg 300
 tcggcttgcc acggacaaca gcttttagcag attgattggg gttggtctgg gggcactcac 360
 tcatatagtg accagattcg ccacacttta aagaggtcat ggaactggta catggaggag 420

cattat

426

<210> 10776
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-D3

<400> 10776

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aagtgatttc tgttgaagaa attaatactt tgagtataaa agtagatgag cttatgaaaa 120
tggttgctag taaaagtgtc catattgatt gtaattttgt gccattctct actttgattg 180
agcaaaataa tgatctcgta gatgtgaatt ttgtctctca aaacaatttc aatagtaatg 240
cttatagagg taattttaat cctaggccat ttcctagaaa ttcctctaata atttatggaa 300
attgctaagg taattattac aataataata ggatgcactc taatcttgaa agtaatgtta 360
aaggatttat taatacccaa aaggttttca atactatggg agaggaaaaa ttgagtaaac 420
ttgatgggat gcctaggagc atggatag 448

<210> 10777
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-D4

<400> 10777

acaccaggcc ctagactgag tcttagcact tgctgtgcgg tgcgccacgc ctctcgctct 60
acggtgctcc accgctctcg tcgttcctgt aaccgcaacc aatcgacgtt gacgcgcta 120
gcttgccctg cggcgctcca tcgatcatgt tgtgcggcga gttgcagcct ctacgcgctg 180
acatgcccat cttgatccac agtgctgaaa cgcaattgca ccaaagggtt gctcaagcct 240
ggcgatgacg cacatcacgg gatcgtctaa ctcatcgccg gggagcgctg cagccttgaa 300
gggccatggg tcccttatag ttttc 325

<210> 10778
<211> 379

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-D6
 <400> 10778
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 ctagctaacc cgactgcgac atggctagat acgtgtcgat attcactggg tcatccatat 120
 atcttttcgtg gtttacatcg tcccgtaaag gaaagagtca tatgtgcggc cacgcatgga 180
 ctgtcacgta cgaatgtagt taaaccatat tgtcctcgct agccctttct ttttcatttc 240
 aaaaggaaac caattaagaa tgtgtgttcg ttgtgtgtgt gtatttctag ctagtccaat 300
 aaagggtcaaa ctccaagtgt tacgagttat gacacgtttt tgtgtttctc accgggggtt 360
 ggcaatcttc gtggtaaata 379

<210> 10779
 <211> 435
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-D7
 <400> 10779
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 ggggggggagt agttgtagca tccaacaat cgatacacta tcaattgcta aaacgtgtgc 120
 acttttgat gtctgataat tgcaggaac gtcggatgtg attgcaagga agtgggtggaa 180
 gtcacgaaga atggcggtaa ttctctaggc gtggcggtag ctatatatga ggagtgtact 240
 tctttttgtc ggactttcac tagtgtaata ctttcagact gtcctacgaa ggttaataga 300
 gcagcacata atttagctca gtttaccgag ggaaacaaa tgtggcaaga atccctcgat 360
 tttctttgag atgttctagc cgatgatgta actctcattt ctgaataaca aaaacaagcc 420
 atgatggttt ttctc 435

<210> 10780
 <211> 332
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-E1

<400> 10780

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gaagcagtgc agacagacac aacacacaac agtactttgc catctaaaga tagcagaagc 120

attaccaat acacatacat gggcaaaggc ccacagaact ctgcgcgaa gaaaatagag 180

cacctacac acggggcgaac cacacaacag gacatggtct tgtgctaaca tatgaaacaa 240

tggcccaagt agtcagcaac aacaagctgc tacttcttga acttgcggtg ggttttccct 300

tgaagaggaa aggggtgatgc agcaaagtag ag 332

<210> 10781

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-E11

<400> 10781

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ccaacgtgcg gcgcctacca aagttgccgc caccatcgac gtccgcgacc ttgcggcacc 120

tgccgccact gtggaatatt gaatcgacct catctcctat ccccgttgca tgcattgtgtg 180

tataaatcca tacgctggcc gagcgcacgt cgctttcact aagaaacaga tcgaatgcat 240

tatggtcggt caacttgacg atgagcagca agccagcaac agcaaggcgt ccctcagaat 300

gtatatgcat tcacatcttt ttgtttttgc gggaaaatag actttgttct tgcttcgatg 360

cgtataaacg tatctctcct tatgcgacgg gtgatgtaat atgtcacatc catgtacaag 420

ctggatatcg gaaaa 435

<210> 10782

<211> 393

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-E12

<400> 10782

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gaacaatctg attttttctg cttatttgca gcgtaaacta tgtacagtaa tcattagacc 120

atctttgaag atctgacgaa caaaagcaga atgggtcttt ctatactggt cgaccccccc 180
 tccccccccc ccttgcggttc tctcgaggg agtggctagc gcgcaacact gccatgctcc 240
 tctgctgctc cgatcatcaca ggggtgggacg gcgacctcgc ctctctgttc attgttctgc 300
 cggtagcgac gttctttgtc caggatcatc cggacagggg ggtcctccag gccatgcgtc 360
 taggcatgta ctgcaacgcc gaccacatgg cta 393

<210> 10783
 <211> 432
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-E2

<400> 10783

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 caagacgtct ccacccttcc aacttttaac ccacatggtg ggcccataac ccacagttcc 120
 acaggatcaa aacctgactc tctgtacac ccccggtttc caaagttatt cccacgctt 180
 gacttcgtat gtaatttacg ggtcaccttc ctaatgctca attctggcat cagacacaat 240
 aattattccg tggctttaaa accactttca cttctgact aggcattgaa cgattgcctg 300
 gctgcctgaa acttcttatt gtaccttcca actttactct cgatgtgttt atttgttcaa 360
 ctcgagaggt actcatatgc tcattcatgg gttaatctca tatcattacc cttataacat 420
 actaccgttg cc 432

<210> 10784
 <211> 393
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-E3

<400> 10784

gacattagac cttatgatgg gtcatatcac tctatcccca aatcctcttt tattccctaa 60
 ctatactata ttattattat ttatcctctt ttttttcttt ttatcaatgg gtttaagatt 120
 cattagcttt ctattctac tctttcacia aggaatgcga agagaactca atggatctta 180
 tcctattcat tgaatagatt tcttttttat tagagtatcg gcaagaaatc ttgggtattc 240

actctatattt taagttttat ttaagtaaac catgcacaat gcataggact aaccccccat 300
 ttccaaattt taaatttgaa atactttaat taatttttag tccttttaaat tgacatagat 360
 acaaatactc tactaggatg atgcacaaga aaa 393

<210> 10785
 <211> 401
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-E5
 <400> 10785

agtgttttgt caaaatattc ctaactattt tgacttttta ataaaatatt aaaaagaaat 60
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 actcagtctc tccatgacca ggacatgcaa ccaattagga actgaggaga gaggaggaca 180
 tgcaaccaat ggagaccgga gccctcaatt tactatgttt tccagcagaa atcgctatgc 240
 gcaaccggac gtgtacctgg ccacatcccc cactaaagca cgtgtcgccc acctattggt 300
 ccgattttgg ctgataagaa aagtcaaaaa aacctggtaa actaaacctg accaagttta 360
 gtatatttag aatatataga gagaaaatca aatctttggt a 401

<210> 10786
 <211> 393
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-E7
 <400> 10786

actgagtcgg attacctcgg gcagggtact tagatgaggt ctgtgaccct accctaggta 60
 tatgactcca tcagatacca tcccatcata ccacatcata atcattctaa tagcatgttg 120
 gcacgcaagg taaaccatta taactcatag ctaatcaagc atggcacaag caactataat 180
 ctctaaatgc cattgcaa atgtttactt cataataagc tgaatcagaa gcaatgaact 240
 catcatattt aaaaaaaca gagaggtcga gttcatacca gcttttctca tctcaataag 300
 tccatcatat atcgtcatta ttgcctttca ctctcatgac cgaacgatgt gtataataat 360
 aagagtgcac gtgcattgga ctaagctgga atc 393

<210> 10787
 <211> 178
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-022-Q1-E1-F1

 <400> 10787

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 gaaaaggagg atttcaagta caagatcgaa atgcatacgc ggattggcat tctctctgtg 120
 tccgggagca ggacatcgtg cgtcggggcgg ctgaggacga cgtagcaggc cgggtgcgt 178

<210> 10788
 <211> 361
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-022-Q1-E1-F10

 <400> 10788

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 agtggttcct tcggccaatc agaattttac acgtggaaat ttcccattgg tccgggctgt 120
 ttttttctta aggttattgg tccgggctgt taacgggtta tcggatccaa aatccgacca 180
 gatagcttaa cagcgttcct ttatggtgga tgccacgtgt cggtcaccct tgataaccac 240
 ttctgtgatg cgcgatttat cgtaatggaa gtggacattt ccgtgatgat aattttggta 300
 atgtcatgga acacttctac gacagcacat gtatgactat cttgattctg tcataaaacc 360
 g 361

<210> 10789
 <211> 414
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-022-Q1-E1-F2

 <400> 10789

 aagttaccga attcccaaac aatgagtcac actgaagata aactaacaat aatgaatgaa 60

aatgacagtg gtgctgaggg agtcctggat tanggggtgt tgggtagcc ggactatacc 120
 ttcagccgga ctcttgact atgaagatac aagattaaag acttcgtccc gtgtccggat 180
 gggactttcc ttggcgagga aggcaagctt ggcgatgtgg atattcaaga tctcctacca 240
 ttgtaaccga ctctatgtaa ccctaaccct acccggtgtc tatataaacc ggagggtaat 300
 aatccgtacg caatcaactc catatacaac aatcatacca taaggctagc ttctaagggt 360
 taacctcctt gatctcgtgg taaatctacc cttgtactac ccatatcaac aata 414

<210> 10790

<211> 412

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-F3

<400> 10790

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 gacaatgagc taggattcgc caaagatcgt acgattagca ggttgacaga gctcaacagc 180
 agagagtact tggaggactt tgaagcagaa tggcaacatc ccctgcatgc tgtagataat 240
 ggcggcgatg tcgtacttgc ataagtggca gggcttcattg tgcaaggacc gcattatagt 300
 tttgttatat ctattatccc gcctggctta tggaggaatg ggagaaatgt tggttttcct 360
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<210> 10791

<211> 265

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-F5

<400> 10791

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 gatgctgcta ctgaaataga tgaatgaagg gcatgacact atcatcctgg ctgggtgctga 180
 ttatggcagt agaagctcaa tggattgggc tgcaaagggt ctaaagtcgt caaggagtga 240

acagcttgat cgcccagtag ttttg 265

<210> 10792
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-F6

<400> 10792

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tgcaaaggtt gaagcaagtt ccattgttgc tgtttttggg cttggcacag ttggacttgc 180
agttgctgat ggggcaaaat cagctggtgc ttctcggatt attggcattg acattgatac 240
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tgacaaagca atccaacaag tccttgttga ccttacagat ggtggtgtgg attacagttt 360
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ggg 423

<210> 10793
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-F7

<400> 10793

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gtagtttaga tcgagtcttt ttttcatacc tatagtccac gaaaaagcca caaaaaaat 180
tagggttagt tcatcatatc cgaaccagtc tgagccattg cataatcttt tctgtatttg 240
cgttgttgaa tttgcagttg catcgctgtg tctagttggt ggtcttagtg tctagtcctt 300
tagagtttca agttctgttc acaagttgtc atgccgccgc cgcacatca tcatcaccgc 360
tgccatatac caccatcgtc atcaccgctg ccataacca ccattgacat caccgcaacc 420
atataccaca tatccac 437

<210> 10794
 <211> 94
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-F8
 <400> 10794
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 gcaacgggag gtccgttcac ctggccctc gttg 94

<210> 10795
 <211> 370
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-G1
 <400> 10795
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 gaaatgaaga gaagattatt ctaaccagta gttagacttc aagtagtggc tttttattta 180
 tttatgtatc ctctccatag aatggaatgt aatagttctg ttggctcaaa tggtgttaat 240
 tggtggctac cttgcattta cgctggcatt tgattcatct ttgtgcaggt aaatcatgct 300
 ctcttgagg agatcgagga gataaaccaa gggctcatag acacgggcct ccgtgtatgc 360
 aaggatgatg 370

<210> 10796
 <211> 428
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-G11
 <400> 10796
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 aagaaactaa gaagaaaaag aaggatgggg aggaagaagg tatgaagaaa gacaaagaga 180

agaagaaaga caagggcggc aaggagaaga ccaacgatcc ggcaaagctt aagaagaagc 240
 tggagaagat cgacgcgaag ttacaagacc tacatgctga aaaggaagac atcctaaggc 300
 agctgaagga gctcgaagag ggaatgacca ctgaagagaa gaagcctgta cagatagtgg 360
 aagcgagtgg caaaggcaaa gtccaaggaa gatgatcctg ttactggcac ctgatcttct 420
 ggaaatcc 428

<210> 10797
 <211> 435
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-G12
 <400> 10797

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 aaatggtcag cacgaatatg ccattgtata actgtttctat gggttcttggc ctagaaaagt 180
 ggtgctgcta tcattggcgt cgcccagaag tggcaagcac ggtgccttca tgatcattac 240
 ttgcacattc tggccagcgt cagcaactgg attgtcacca tcatcgctgt tattgtcaca 300
 acctccttat ttccccacct ctccatcctc ataatcctcc ttcatttcct cgtcgtcacc 360
 atcagcttct ttgagtcggt gtagagttac ctgccatggg aaccatcggc gcaggatggt 420
 ccaaagcaac tgaca 435

<210> 10798
 <211> 227
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-G2
 <400> 10798

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 aagggtggtg gagatgttgg tcggggaagc atttgggtcc acaggatgaa tgtgtactag 180
 cttcatctct cctgccgact ggaaagcgga ttccacagtc ggctttt 227

<210> 10799
 <211> 360
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-022-Q1-E1-G3

 <400> 10799

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 tcctgggtctt tggatgacgc atttatggat ggatggacac actgtttaaa ccgttattgt 180
 atattgatga tcacttgtag gcgatcagtc atcttacaca tcgaattacc tttcgtgag 240
 caatgattct gaatactgtt aaatactctt atgctacctg ttttcatcaa catttataca 300
 tggattttgc tctaactcct ccagaaatth atgggggaact cacaggacgc gctacatgat 360

<210> 10800
 <211> 148
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-022-Q1-E1-G4

 <400> 10800

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 ttgactcgac cgtagttgcc gctggagagg ataccaatga acgtgaggaa ggactacagc 120
 catctgaaga aagtttacct caacaaat 148

<210> 10801
 <211> 125
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-022-Q1-E1-G5

 <400> 10801

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 cttagttatt attatgtcgt gccctatcgt tatctgagac tgggttgtgg tggttactgt 120
 tttgg 125

<210> 10802
<211> 165
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-022-Q1-E1-G6

<400> 10802

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caaagtgggtt tgccccaaga aggtatattc atctgcgatt atccgacatg atgcgagaca 120
nagtgatttg ccaccttgaa aggcttaata agaaaagcct tacct 165

<210> 10803
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-H1

<400> 10803

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acggcacgta tccatgtggc cgacatctat caggctatcc tggctagcat gagcatcaaa 180
tctacaagga agatatacaa tgtggtggat gatgaccctg ccccgagatc cgaggtcttt 240
gcatttgctc agagcttgat agagaaaaga accctgatct tgcagcggat tctgcaggac 300
caaacagcca gaacaagaat tatagctgct gaaaaacggg tatctaattg tccgttgaaa 360
ctggagctgg gcgttaggct ttcccaccca tc 392

<210> 10804
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-H3

<400> 10804

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ccttggttac aggaccggaa caaaatgaag aagcagatgc acctactcaa gtcaaaccag 180
 ttgctgttat acctggtacg ggaccagaag agaagaaagt agaggcatcc acccaagagg 240
 ataatgctga agcagttgcc gcagagccag aatctgctag agcccaggaa aatgcggaag 300
 cttctactca gcctagtcct atggagatag agtcggttca ggaaacagct atgctgggag 360
 aagctgaaac caggcagcaa ctgccacttc cgtctgccga ggggtgtggtg gc 412

<210> 10805
 <211> 409
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-H4

<400> 10805

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 tgagtgcgag gaatcctgag atcccatcc gcaaactgag ggtcaggctc tgtttgaggc 120
 ctgatgaatg tctctccatc agccaagtcg tcgcccttgc catggtaacc caaaagctcg 180
 atgttgctga gtttgtggtc ctcacggaga cgatttgttt gaaatgcact gaagaccatc 240
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 gtctcacacg cctgtggctg cgcaatatga tgtttggtga actggacatc cccaacatcc 360
 tcagcgcctg taagagggtg ggatcactgc gtctctccta ttgtgacgc 409

<210> 10806
 <211> 399
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-H5

<400> 10806

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 aggttccaaa ctatgtcaga gaacatcatt acaaagatag atgaaatggg tgcaagaatc 180
 gatgaattgg agctgagcat caatgacctc aaggctgaaa tgggcagcga tggatgacc 240
 cctactaaag tgaaggacga agaatcaaag ccagcagaca gctctgcctg atttaagcag 300

aagtagcaga agcaagtcgt attagtcttg gttccatgtc aatatcatca gccattcatc 360
actaacttaa tgcattgtcat gagatgttag tcgcactgc 399

<210> 10807
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-H7

<400> 10807

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ttccggtggt cttctttgga agcggatcaa gctaaccctt actcgtaaag ccaatgccaa 180
aacccccctc cgtcgtgttt ggcagaatga ggctgttcta agggcgtgtg gtgaatcaga 240
tgcaccaaat ccgccgggag ctagcaacac aaaaagctct agcaatgcgg tgaaaaatgc 300
gtaaggccga agagaagcta gtcctagttt gtaaggactc gtagattaag tctctgtcgt 360
tacctgattt tacaaaaata atatttgaac cttgtgtttg gttaatagtt ttgccaaaga 420
agaggcacct ccacaccaa 439

<210> 10808
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-A3

<400> 10808

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aggcccctga ggatcgtcgt ctaagcccat agcatctgga aacgcaacta gaaaacgggc 120
ctggatcatt gctagccagt cagattatgc ctctaaagga cctatggcag taccggccaa 180
agcaccacag caagtaagac acatcatgta gactacgagc catctctccc caaggaaagt 240
gaaacctgcg tgtcctcgat ctccatctat ctgctaagca ggtaaggagt gacctgtcct 300
aagagaaacg tttcacttgc ctcatgcaaa actgcatcgg ttcaccttcc tcatccttgt 360
cccgtgttc aact 374

<210> 10809
 <211> 407
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-B1

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 caagggactc ttcagctgct gtttctgcaa gatcaggccg gactgcagaa cgaaagctga 180
 cgctgtgtac aggtctgaaa cccacgaggt gttccatggg tagcgagcat gttgtagctt 240
 aagttaggag agatgagcac cgttgaaaca aggctgataa tgttctatca ttttggtagc 300
 gatgtgggtg gccaaattcc attggaagtt agatcaattt acgccagtct ttgaactgca 360
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<210> 10810
 <211> 415
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-023-Q1-E1-B11

<400> 10810

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 aagttcagca agaatggggc atacttgaga agaatctacc agattatatt tatgtcaggg 180
 tatttgagga tcgtatggat ctcatgagag ctgtgattat tggagcaagt ggcacaccat 240
 accaagatgg tctgttcttc tttgacttct acctccacc tgagtttcca caagctcctc 300
 cgtcggcata ctatcattct ggcggcttgc gtgtaaacc aaacctttat gtggatggga 360
 aggtttgttt aagcctctta aatacttgga ctggcagang gaatgaagta tggga 415

<210> 10811
 <211> 422
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-B3

<400> 10811

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ttgaacacac aggcattgcta tgttgtcatg tgaaagggag gacagtggcg tgtacattgt  180
gcactacggc cgcgagttca ctgagttgtg cctccgggtca ccgctgagca gggtaagatg  240
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ggtacacctg caccacacca ggctcctcgg agggcctctg ttctgaagtg catttgtgta  360
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tc                                                                    422
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<210> 10812

<211> 369

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-B4

<400> 10812

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tcgtgatgac cgcagctctc ctctatgtga tggtagttta gatgatcgat atcgacctgt  180
aatgtgaaga caaactcgct actcgcggtc tcgagacttg taatgttcta actttgttcg  240
gtattttgaa ttccgagact aatatgatga attgtattag gagactaatc gtccattgta  300
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taccctgtg                                                                    369
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<210> 10813

<211> 412

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-B6

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catgttcggt gaaatgtgtg tgtgagctag actagtacaa tacttcttgt acgtgcactt 240
gtgtatgatt ggagtgttat gtagtttatt ttgcaccgta ccctttcttt acatttttga 300
gaattgtccc ctttctttcc tcatatatag tctccagctc caaccaaatt taatttcata 360
gaagttcaaa gatgaccagc atagaaggctc atagaaaaaa aacatttttt ta 412

<210> 10814

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-C10

<400> 10814

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ttcgggtaccg tgcattgccc tttctcacat tgagagttgg tgaaaacttc gccggtgcat 180
ccaaaccccg tgatatgata cactctttca cacataaacc tccttatatc ttcctcaaaa 240
cagccaccat acctacctat tatggcatTT ccatagccat tccgagatat attgccatgc 300
aactttccac catctcgttt atcatgacac attcatcatt gtcattattgc ttagcatgat 360
catgtagttg acatagtatt tgtggcaaag ccaccgttca caattctttc atacatg 417

<210> 10815

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-C3

<400> 10815

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tcgtgaccct accctaggta catgacccca tcagcatgcg cgtagtacct gatttttgac 120

gacgtctaaa tttttgcaat aagtatatga gttcttttga ctaatgttga gtccacggat 180
tatacgcaact tttaaccttc cgcctttgct agcctctaca gtaccgtgca gtgccctttc 240
acagcttgag agttgggtgca aacttcgccc gtgcatccaa aaccctgat acgatacgct 300
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gcatttccat ggccattccg agatatattg ccatgcaact ttccaccatt c 411

<210> 10816
<211> 278
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-C5

<400> 10816

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attttcctct gagcacactc acccttgaca ttctccatt gaaagatctg cggtttacgt 180
cagctctggc ccattgagg gtgtgcgcta attttctctg gcaaaggctg tagcttccag 240
agtgctaattg ccaaagcctg agacttgaga gtgttatt 278

<210> 10817
<211> 370
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-C6

<400> 10817

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ctcgtggcgg acatttgcaa ataacatttt cgttttagtga aacttaaaac acaagtgagt 180
caggaaaaca agtttatattt attgcaccac agaaaatata atttttacaa aagttttgag 240
tgggtactaa attttgtaac agatgcagta caaataaatt cctagttttt ttatcatata 300
ggacaaatta gtaattacta ggagaagagt acaattcaaa gaaggcagag tcaatcagta 360
gctcgtttcc 370

<210> 10818
 <211> 434
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-D2

<400> 10818

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agatcgagtc tgttcttcat acctacagtc cagcaaaaag cgcacaaaaa aaattagggt   180
tagttcatca tatccgaacc aatctgagcc ttgcataat ctttttaggg tttttgcttt   240
gttgaatttg cggttgcacg gtcgtgtcaa gttgctggtc ttagagtcta gtcttttaga   300
gtttcgagtt ctggtcataa gttgtcacgc cgccgcgcga ccatcagcat cgccttgcca   360
tctaccacca ttgcttatcc gtcaccgcct tgaatccgta accatatacc aacaacgctg   420
tcatatagca ccac                                                    434
  
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<210> 10819
 <211> 410
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-D6

<400> 10819

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gtcatctctt aggtcaaagc atatttctcc ttcatatgtc catgcgtggt cggacattaa   120
acagggtccc aaaattcaac tgtttgata gtttggtctt tcaaattcag accatacgtg   180
gaggagaaaa atggctcttc ggactatctg ccatgtcacg taggtccaac aaaaaaacc   240
acccacagat gtagccttcc cttttctgtg tggatcccc ctttccctt cggtttccat   300
catagcggaa catttcacgt tggagccctc tcctttaaaa ctggatgaca cccatctcac   360
attcgccgtg cgcctctcgc tcctttacac tgtactttcc catgggacgc           410
  
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<210> 10820
 <211> 298
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-023-Q1-E1-E2

<400> 10820

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tggtgcaaag tttgcagccg tcgcggcatt gtgcgtccaa tacgaagccg acttctggcc 120

aaacatgagc atcgctgtca aggcgtcteta gcccctgctg aatgcgcgag cagcccaccc 180

tggggctgag catgccggac gctaaactcc actccttgta tgatataata gataaggaaa 240

aatgagccat caattgttgt tcttgcgggg cgcgtggcaa gcggtttttg tacatttg 298

<210> 10821

<211> 416

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-023-Q1-E1-E3

<400> 10821

gggtcgacac tatttgttca attgaatatt gtggcgaatt tgctttttgc gtgccgattc 60

aaaatgggat atttttgttt taacctggca attgctccgc acacggttca actaaatgag 120

tgtgtgtgat ccacatcgga aagcatatgt caatcctatt ggaaccgtcg gtgatacaca 180

gtagatcgca aacgattccc agcgtatta tgtgtgcgta ggttctccgg aaccgtttgt 240

gatatcgtgt tatcgcacac gagaactggg agtaaaccgt ggccaatgca aaatacaatc 300

ccagtcgtat ttattgtagg aaacgtgtgg gtcccaaact aaaagcacac gtcactcttg 360

cggcaaccgt cggtgatacc taacaaatca caaacggtct gcagcacttg tatgtg 416

<210> 10822

<211> 400

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-023-Q1-E1-F4

<400> 10822

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caacagatct acgcgcgcga ggttcggttc ggtcttcgga gctcgagaca tggcggagga 120

gaatgccccca gttgagggtg ccgctccggt tgcggccccct accccagttc ttggagagcc 180
catggacttg atgactgctc tgcagcttgt gatgaagaag tcaagcgctc atgacggcct 240
tgtcaagggga cttcgtgaag ctgcgaaagc gattgagaag catgctgctc agatctgtgt 300
gcttgctgag gactgcgacc agcctgatta cgtgaagctg gtgaaggcac tgtgtgctga 360
gcacaacggt cacttgggtca ctgtgcctag tgccaaaact 400

<210> 10823
<211> 233
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-G1

<400> 10823

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atgacatctg aaagacggaa tgtgtgctac gttcacggct gagtggatgg caagtgtgga 120
ttcctccctc ggagtcttag tcgtgggtggg gtggcagatc ttgagttcga tggcgtgtcc 180
ggggtggtgc ccccgattcg agtcgttcag agacagtgac ctcacctttg gga 233

<210> 10824
<211> 240
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-H1

<400> 10824

cgggtccagg ctatcctcca aacggagtcg tacaacaccg accaccccct attgcaattg 60
caatgacaga gctgaaaaag acgaggcgaa cggcggcagc gtggtgtttc tgccacatga 120
ttttcattgc aaactttctg caacatcacg tgtgttcag aaattccttc cgcaacaact 180
cctgtgttgc acaaaaagtg aagataaaga agtccgcagc atctttgtgg caaaaattct 240

<210> 10825
<211> 360
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-H12

<400> 10825

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cccggcacct gggacaggaa aagccgaaat ctatggcagc cctcacaaca ctcatgacac 120
gcttttgcac ggaagaagac agctggctag ctgcagtaa caacttacca gagaaccttg 180
gtaattcgga taccaatgac aaaagtggca cgacacgccg gaataagcaa aaacgccgca 240
tttacagcga cagcaatgaa gacacggcag tcaatgccgg attcaaaggc taaaaatccg 300
gtcagcggaa aaagcattca caaagaatac ttatggcctg tcgagtttgg accgaatact 360

<210> 10826

<211> 398

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-H3

<400> 10826

gggtccaccc tccgcatgaa ggttggaagc aaatgcaagt tcataccaaa agatcgtaa 60
caacaacacc aacttgcgga tgacaaggta gtacaactac caataccaaa caaacttata 120
atctttttac tcctggccct agtggttcgtc tggtagaaaa tcttgagag gaccaactcc 180
cactccttct cttgctccag gtccccgagg tggtagtggg gcataccca gttggtcctc 240
tactggtcga agttcttgtt ggtgtgctgc accagaacct tttttgctgc ccgttagccg 300
gccgttgacc atcacgggca aggtattgcc ggtcttgcgc cacatcgcggt gcataccgca 360
ctacgacggt atcttgcaac aagtccacgt gccccttt 398

<210> 10827

<211> 419

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-H4

<400> 10827

tcataggaag ggcataca ctgtcaattg cagaggcttg gacctgcttc ggcatacagt 60
agagcaaaca agaaggtaa gccggaaaca aatatttcat cctcggtcgg acttctcatc 120
tcgcaatgga agccaagttc tttcggttcc tgaagcttgc tggagttggc ttcaaagcca 180

ggacagagcg cgaaggccgc gagggtgttc tgaaactggg ctacagccat gaggtgcagt 240
tcaccgctcc acctgccgtc cgcgtcttct gcttcaagcc caacataata tgctgtactg 300
gcattgacaa gcatagagtg caccatttctg ctggagctgt ccgatgcagt aaacctccag 360
aagtgtacaa ggggaagggc atactgtaca tcgacgaggt cataaagctg aaacccggg 419

<210> 10828
<211> 404
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-024-Q1-E1-A2
<400> 10828

cgggtcgaca cttctccaca tacacaagca taccacacaa cctccaaagg ctgctactga 60
gctcaatgtc cactgccaat ttgccatgtt gtcagatagc tttggaaaag tgtttgtcaa 120
atcttaagta tctcagaggt ttgcacaagc attgctgctg cttgggtccat accattatct 180
cacattcttc actgctgtta accactatca tgctctgagt ctgccaacac tattgcttgc 240
ctcctatcag aggaggtttc tacgggcaaa atgtataatg tgaagaaggc tatcaggagc 300
atacgaaga cgaactgacat cattatgaaa gcgtccgagg ctgcataatg gaagatgctc 360
agtctttttg tcatccatcg tcgattgaca cgcctctgtg gatt 404

<210> 10829
<211> 454
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-024-Q1-E1-A3
<400> 10829

gggtcgacac agccgtagcc gtcttggcaa accttgccac aataccagaa gggaggaccg 60
caatcgggca ggcccggtgt atcccagccc tcgtcgaagt cggttgagctg gggtcggcac 120
gggggaaaga aaatgctgcc gcggcggttc ttgagctatg cacaacagc aataggttct 180
gcagcatagt tctccaagag ggcgccgtgc ctctcttagt cgcgctgtca cagtcgggaa 240
cacctcgggc aagagaaaag gcgcaagctc ttctcagcta tttccgcagc caaagacatg 300
gcaactcggc gaggagatga tgatatgatg ttagcatcat aattttgtag tgtacatgaa 360

gcatttcccg cgaatggcag ttaaatttgt tgactggctg gtgctgtgca ctgtttgttt 420
atagtcagat tgagagagat tgtgctcatc atcc 454

<210> 10830
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-A4

<400> 10830

cggggccacc cgcttttttt aattattttt tttttttttt tttgaacaat atggcatgcg 60
ttctgcttct tatacattat gatctgaaac agatcaacca actcaccttg tgccaaacgc 120
ccagacataa caaaatttcc atgcgctgcc atggatgctc attcgacagg cgagccagac 180
ctttggttac agtacaagaa ttgttgctc tagacaagca tctgctggta aggcagggga 240
aaaactgaag agtcagccag gcttacgtgc aaggcgacat caatcaagat aaatagctag 300
aggagaaaaa aaaatgcagc agaggtcatc agtgatactc tgccaaaaaa aaatgggttg 360
gcttagcatt gccgaaccaa ctgtgcatct caggagatgc ctgccatgcc actgaacaca 420
tcatggtcaa tgtgg 435

<210> 10831
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-A5

<400> 10831

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gagagccagg tcaaacgatt tcgctccctg gtaatcgaga cataagcaat cccactcaa 120
actggatcgt aggccttttac cttcacctta aggggccgac cagtataaat cccgtgtcct 180
ttgtcccgat taaccctttt aagtttcta attgcgatgg ctccctcact aagtccttcc 240
actaggacat ctaacgtgac aattccatga caccatcct cctcctcctt ccacaaccg 300
cacacccga ccgctggtgc aacacttcca cacaatcac cgacccttcc accacataag 360
cgctcccta aacctatggt ggacacagta tagacaggat 400

<210> 10832
 <211> 429
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-A7

<400> 10832

gggccacgaa cctactcaaa atgaagatgt tgagccggct gccataaagc cagaggcagt 60
 ggagcatgct ggtacagaag ctgatccaag taaagaagca tctatacctc cacaagagga 120
 aaccgctgct gtagccttgg ttacaggacc ggaacaaaat gaagaagcag atgcacctac 180
 tcaagtogaa cccgttgcca tagtgccaga ttccatggag catgctagta cccaagttga 240
 tcaaagtata gaaacagctg tgcgtctccc agacgaaact tctgttatac ctggtacgga 300
 accagaagag aagaaagtag aggcattcccc ccaagaggat aatggtggag cagttgccgc 360
 agagccagaa cctgctggaa cccatgaaaa tgcagaagtt tctactcagc ctagtcctat 420
 ggagataga 429

<210> 10833
 <211> 475
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-A8

<400> 10833

gtaccggacg tacattcccc ggtccacatg gccaactggg ttgctgccat ggtcatggac 60
 aaggcgtatg acggttttga gaaggcatal tctttcaatg caacagcaga gggcaataac 120
 accatcttta tgcagggcct tgaggggctc aattaccttg tgaagcagac caacatgagc 180
 gggtcggatt acctcgtgcc gggaaagcag caatcagtgc tctcattcac caagaagctg 240
 actcctgata togatgttgt cgctggagat gggttcccaa caaagggtctt cttcaatggc 300
 gacgaatgtg ctatgccgca gaggttacca atcaagagtg gtggattcag gacccatcta 360
 agcagtcctt ttgctttggg attgctcatg gctgcctcgg ccttgctgtt gcttcagcaa 420
 taatcttgtt gctgttgctc cgattctttg attccttcag gtggttccat cagcg 475

<210> 10834

<211> 419
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-024-Q1-E1-B1
 <400> 10834

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 cgagaatttc ggccaggcca ctataccaca ccaaggtaac tggtttttga aaagtattgtg 120
 ttttaaattt ttttgtttag aatttttagaa aaatgtccat gttcacaaat tttgttcata 180
 aattaaaaaa tattcaggaa tttcagaaac cgtcatgtt ttaaaaaaat tgtttgcatt 240
 ttcgataaat gtttgaaaaa ttcaacaaaa atgtttgtat ttttagaaat ttgtaaacat 300
 tcaaaaaaaa tgttcatatt ttaaaattgt ggtcaaaact tgttcagaag ttgaaaaatg 360
 ttcccgtttt accttttggc cacaactaa aaaatgttcc gtatttttca ttttttttt 419

<210> 10835
 <211> 472
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-024-Q1-E1-B2
 <400> 10835

ggtccgaata tccgggtcga ccagattgtc attctgggca ccgtatttcg acacaatatg 60
 tacgcctttg agaagttcat gggagtccta aagaaatatg tccgtaagcg cgctaggcca 120
 gaaggaagca tctccatggg ccatcagaca gaggatgtca tcggggtttg tgttgacttc 180
 attcctggcc ataagaagat agatctccc aaatcgcggt atgaggggag actgactgga 240
 aaaggcacgc ttggaaggga ctcaataata tgtacggacg gatattcttg gtctcaagca 300
 tgctacacg ttctacagaa ctcgaccatg gtgacccgt atgtccgtga acagaagaac 360
 agtctgcgct ccatacacc ggagcaatgc gacgactgga ttacatgtga acacatcagg 420
 actttcagca gttggttgg aacacgtctc agacgtgaca aactgtttg tg 472

<210> 10836
 <211> 421
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-024-Q1-E1-B3

<400> 10836

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tctgcttctt atacattatg atctgaaaca gatcaaccaa ctctccttgt gccaaacgcc 120
caaacataac aaaatttcca tgcgctgcc tggatgctca ttcgacaggc gagccagacc 180
tttggttaca gtacaagaat tgttgctct aaacaagcat ctgctggtag ggcaggggaa 240
aaactgaaga gtcagccagg cttacgtgca aggcgacatc aatcaaaata aatagctaga 300
ggagaaaaaa aaatgcagca gaggtcatca gtgatactct gccaaaaaa aatgggttgg 360
tttagcattg ccgaaccaac tgtgcatctc aagagatgcc ctgcatgnnc atgaacacat 420
c 421

<210> 10837
<211> 448
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-024-Q1-E1-B4

<400> 10837

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tctatcaagt ggtatcagat ttccagggtg ctcggtgaga ttttacagtt tttcgtagtt 120
tagatcgagt cggttcttca tacctacagt ccacgaaaaa gccacacaaa aaaaattagg 180
gtagttcat catatccgaa ccaatctgag cctttgcata atcttttttag ggttttgctt 240
tggtgaattt ggggttgcac cgtcgtgtct agttgctggt cttagagtct agtcttttag 300
agtttcgagt tttggtcata agttgtcacg ccgccgccgc accatcatca tcaccctgc 360
catctaccac caccgcttat ccgccaacgc ttccaatccg tatccatata ccaccaccgc 420
tgtcatatac tancaccgct ggcattca 448

<210> 10838
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-B7

<400> 10838

attcgcggggt ccacattgag ccagaaatgc atgtcaagag ggcgatgaat gagatcaatg 60
cagcttctag gatgagggtcg gcagccaatg acaaagcaga ggccgaaaag attctccaga 120
ttaaacgagc agagggagaa gccgagtcaa agtacttggc tgggtgtgggc attgcaaggc 180
agcgtcaggc tatcgtggat ggtctgagag acagcgtcct tgccttctcg gagaacgtcc 240
ctggcactac tgcgaaagac atcatggaca tggttctggc caccagtat ttcgacacca 300
tgaaagagat tggggcctca tccaaatctt cttcgggtgtt catcccccat ggtcctggag 360
ccgtcaagga tgtcgcatcg cagattagag atgggctcct ccaggccaat actctctaag 420
tgagggtcat gg 432

<210> 10839

<211> 451

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-C1

<400> 10839

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tcagccgtca cctagacctt ctttggttca gaaaatagat gacaacactg taacttaata 120
ttacacagaa cattgaggag gactttgata accgaccttc aaaaaaaagc aaaaatttct 180
gaatcaagtg ttctggagcc atcacctatg tcaacatgta ctccagtttc tgagtgtttt 240
gaatcgattg tgccaaaatc agataattag atagatccgt gtcctattgc catcacctcc 300
atccccatct agctcgacat tatctcaaga acatcggtcg agccgtacaa atggcgcttg 360
cagcggctac accagaggta tttatccctt tgatgaaagc taatcactgc atgtaatccc 420
ctgttttagtt gttgttctgg cctggttata c 451

<210> 10840

<211> 460

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-C2

<400> 10840

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atcacgagaa gcatatgtca atttcattat ggactttggc aatgatacgt tgatgttttg 120
actacgacgc gacacctacat ggatcaggga gacacacgcg accaacaagt aatcaaagaa 180
aataatggcc cagagatagt ttctcgggac agcaacacaa tcttctgcat gcaagcagtg 240
gatactagca tgggcttcgg atcatcccat ggcatacttc tgcgtccagc tgcgggctgt 300
cgtctcgtag ttggaccgat ccgtcttgta catgtgggca atctcaggga cgagagggtc 360
gtccgggtta gggtcggtaa gcagtgcgca gattgaaagc agaaccttag agattgtcaa 420
agcatgaact cattgctcct tcagaatgac gaggcataatg 460

<210> 10841

<211> 415

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-024-Q1-E1-C3

<400> 10841

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tgaaaacata ccattatctg aggatgcatt gtatgagatg aaagattggg gtagccctga 120
aggatgagcta caaggcatgg ttttggacat tgaaagatcc atcttccggg acctcattga 180
cgaggtcata gggtgcgagg ctacagagag gatgcaagct ggacaatgga aactgcgtaa 240
gcagctgtct ttcagtagta taaactgaat acgactggcg atagtcgttg tttccattan 300
gaggcttagc cactagtata aatgtaacct tttgtatttt tctgaaaact gaattatata 360
gaagaaatat aattattcct ggaaaaaaaa anaancatag aaattgtcaa agcaa 415

<210> 10842

<211> 450

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-024-Q1-E1-C4

<400> 10842

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 attgtccttg gtgtggagaa gctgataaca tcaaagatga tacttgctgg gtcgaaccgg 120
 agacttcatt cctgacaccg gaactctggc ttggctgtgg ctggggttagc ggcagacggg 180
 aggcagatag tctcaagagc aaagtcagaa gcagccaact atgaaaagggt atacggagaa 240
 cccatgcctg taaaggaatt agctgatcgt gttgctagct atgttcactc gtgtacactc 300
 tactgggtggc tcaggccttt tggctgtgga gttattcttg gaggctatga tanggatggg 360
 ccacagctct acatgatcga accttcaggc ctctcctata aatatttttg tgctgctctg 420
 ggtaaaggaa gacaagctgc aaaaacggag 450

<210> 10843
 <211> 460
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-024-Q1-E1-C6
 <400> 10843

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 tcctaataac accagggtat tagataccgg ttcggttgct aagtgttagt aagtcaaaat 120
 ataagctgtg gaataaacgg agactagcta aagggtgagat gacgatatgt gttggaagtg 180
 tttccaagggt tgatgtgatc aagcatcgca tgctccctct accatcgaga ttgggggttaa 240
 acctgtataa ttagtatttg gtgtatgcgt tgagcataga catgattgga ttatgtttat 300
 cgcaatatgg ttattcatta gaggagaata atggatactc tgtctatttg aataatacct 360
 tcaatggtct tgcaactaag atgaatggtt tattgaatct cgatcgtagt gatacacatg 420
 ttcatgcaaa aacatataga tagtaatgat actaccacat 460

<210> 10844
 <211> 371
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-024-Q1-E1-D1
 <400> 10844

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ttcctggcac atggcacttc aggtgcacga tccttccgca ggaggagaag atcccggcaa 120
 tcatctcccg cttcacggtg ttccatgaga cgttcatggc agagtaccgt gactaaactg 180
 gtgtaacatg tgtgggatta catgcaagcc tcatggattt tccctaggcg tttttgcccg 240
 cgttgacagc agtatcctgt agatgagaca aaataaagca aatccatggc ttgtgtgtgt 300
 gatactatat cagattacca gtctgatgcc tttgatggca aattggcaac tgagaatttt 360
 tatttccacc t 371

<210> 10845
 <211> 456
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-D2

<400> 10845

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 ttcagtggaa caccattata agttcacaac accagaatga atcatgtcaa aaggaagcac 120
 catgcaagct cataatacaa tacaattaac atttaacacc ttgcaataaa tatttgttct 180
 gttgacagtc acaccatgct gataataaaa caacttttga tggacaaacc gcaagaggaa 240
 aaatatggtg tctttgcatt ttgtgccaag aagagacata agagaaaaaa aaggaagaac 300
 aaacagagca aaaaggagaa gacacaatta tgtggcagac aggtacagat acatctcaca 360
 tgttcttggc ttcttctttc ttatgtatat aacaagatga gacttgggac tgactgactg 420
 gaaaagagaa gatcacaac aaaatgactt cactga 456

<210> 10846
 <211> 460
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-024-Q1-E1-D3

<400> 10846

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 aggtcgccgg gggcaaggcc ggcaacctcg gggactccgt caccgtcgcc cgcgacaaga 120
 gcaaggtcac cgtcacctcc gacggggcct tctccaagag gtacttgaag tacttgacga 180

agaagtacct gaagaagcac aacgtgcgtg actggcttcg ggtgatttca tccaacaagg 240
accgcagcgt ctacgagctc cggctacttca acattgctga gaacgagggc gaggaggagg 300
actagatgtg cactgccttg tttctgtgcc gtgtgaaact ttgaacttgt tggagcactt 360
ctgcagtaga gttttgatgt ntatgtnttc acccctgttt tgaattgtgg ccaggacgcc 420
atgtgatgga tgcttagata accaagctga agaattgtcc 460

<210> 10847
<211> 433
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-024-Q1-E1-D4

<400> 10847

cgggtccact ccgaggaact cactgtggag gagcgcaacc tcctctctgt tgcatacaag 60
aatgtgattg gagcccgccg tgccctcatgg cgcacatct cctccattga acagaaggag 120
gagagccgtg gcaacgagga ccgggtcaca ctcatcaagg aataccgtgg caagatcgaa 180
actgagctta gcaagatctg tgatggcatc ctcaagctgc tcgaaacca ccttggtccc 240
tcttccactg cccctgagtc caaggtcttt tatcttaaga tgaaggggtga ctactacagg 300
tatcttgccg aattcaagag tgggcctgag atgaaggatg ctgctgagaa atacatgggtg 360
gcatacaagg ctgctcaaga tattgctttg gctganctgg ctccaactca tccgattang 420
cttgggctgg cac 433

<210> 10848
<211> 457
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-D6

<400> 10848

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acgggacacc tttgcctcta tcaagtggta tcagatttcc aggttgctcg gtgagatttt 120
acagtttttc gtagtttaga tcgagtctgt tcttcatacc tacagtccac gagaaaagcc 180

acaaaaaaaaat tagggttagt tcatcatatc cgaaccaatc tgagcctttg cataatcggt 240
 ttaggggtttt gctttgttga atttgcggtt gcatcgctgt gtctacttgc tgggtcttaga 300
 gtctagtctt ttagagtttc gagttctggt cataagttgt cacgcgcgcg ccggaccatc 360
 atcatcgctc ctgccatcta ccaccatcgc accgaatccg tatccatata gtagcaacaa 420
 tccgtgtcga tataaccacca ccgattcata tccatat 457

<210> 10849
 <211> 424
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-024-Q1-E1-E2
 <400> 10849

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 ctctcccagt acccctttta ccaacaatca gggtgaaaaa tcctcctccg tctcaagcgg 120
 acatggcgtg gagcactttt tgaatttgcg aacacttttt gaattcatgg acatattttc 180
 aattcacaaa catttgaatt tgcaaagatc ttttgaaatt cacaataatt ttctagattc 240
 acaaacaatt tttgagctca agaacatttt tttgaactcg tgaacatttt tataatctgc 300
 acctttttta atttgtaaac aattatagtt ttagctcaag aacattttta taatctgcac 360
 cattttaaat ttgtaaacaa atacatttgt tagctcaaga acattttttg aattcgtgaa 420
 catg 424

<210> 10850
 <211> 462
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-024-Q1-E1-E3
 <400> 10850

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 tggctcgcca gacacctcgg ccaagaaaat ccaagaacaa tggccgcact aacaagactc 120
 atgacctcgt tttgcgcagg agaagacagc tggttggcaa gatgcagcac cagtgaacca 180
 agtacatccg aagctagggg tggaaacgga aaaccacgat gcaataagga ccgtcaccgg 240

actaaagaaa aaaatccgaa gagcacggca gtcaacgccg gattcaaaaag ctcacgacat 300
aatcagaaaa agccgccttc caagataaca gggacggcct atccaaccta aacaaaatct 360
tggataggat atgtcaaata cacaacactc ctggaaagcc tgctaaccat acccacagag 420
attgttgggt tttcaaaca tccggcagac tcaacgccga ac 462

<210> 10851

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-E4

<400> 10851

ggtccaagat acccgggtcc acagttgtcc acttacacaa gcacaccac caacctcaa 60
aggctgctac tgagctcaat gtccattgcc aatttgccat gttgtcagat agcttttgaa 120
aggtgtttgt caaatcttaa gtatctcaga ggtttgcaca agcattgctg ctgcttggtc 180
catacatta gctcacattc ttcactgctg ttaaccaata tcttgtcctg ggtctgcaa 240
gacgattgct tgcctcctag cggaggaggt ttctacgggc aaaatgaaga aggtgaagaa 300
ggctatcaag agcataggca agaagactga cgtcattagg aaggcgccg cggtgctta 360
atggaggatg ctcagtcttt ttgtcatcca tcttcgattg actcgctct gtggatttgg 420
tggcgt 462

<210> 10852

<211> 471

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-E7

<400> 10852

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ggatattgtt tcgtccctga agatgggacg ttccctaccg aaaaccatca tgctttttgt 120
gagaagctcc ggtttgtgag aagcatatac ccaaacctgc cccaaatggg acaaaaattt 180
taccacggca tgttgatgcc gtcctatgat agcatgcaa gtttcatgaa tttcagaata 240
gttttggatt tactagaatt taaaaaccag gcattctcaat gttatgccgg caatcaacgg 300

tgctatgggtg ttgaaattc attcacattt cttgcatggg acataagcat gcacccaagg 360
acacagatta tattttttcaa ccaatttata tgcagtggcg catgcgcatg tagttcaaat 420
ttgaattatt cacataaatg cattgaaaac tcagttaatg cataaaaatg t 471

<210> 10853
<211> 458
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-024-Q1-E1-F3
<400> 10853

cggtgccacc cataagtacc aagtgattcc atctccaata tgacgtcaat atctaaaatc 60
tctctacttg gggaaatcca tcaacggcgt ctactgtgca ctaatcttta attcagagga 120
acggctacgg atttggctac ttaatgatga tgaggtagcg ggtcaaacia aatgggtgct 180
caagaatgac gtgagcattc aaccactcgt gggaataaca catcaacact ttggccttca 240
aaacaatgga ctttggactt tgcaaaacac ttcctacgaa ccaatggcgg agcagaaatt 300
tgaatgggat cctgacagcg acatcaccct tgaagctgag gctaaggctc caatagatca 360
ccttcatgat gatattcgta ccctaagatt tcatccttac aaggagattc tcttcttatg 420
gacaaattgc aaaagagtag tagcttacca tttgaaca 458

<210> 10854
<211> 449
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-024-Q1-E1-F4
<400> 10854

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gtgggcgtgt tctaccaggc tggcgagtac gccgacaaga accccaactt cgtcggctgc 120
gttgagggcg ccctcgcat acgcgactgg ctcgagtcca aggggcatca ctacattgtc 180
accgacgaca aggagggtt gaacagcgag ctggagaagc acattgaaga catgcatgtt 240
ctgataacca cccattcca cccagcctat gttactgccg agaggatcaa gaacgcaaag 300
aacctcgagc tgcttctcac agctgggatt ggctcggacc atattgattt gccagctgct 360

gctgctgcaa gcatgacagt ggctgaggtt actggaagta acactgtctc tgtggcagaa 420
gatgagctca tgcgcatctt gattctgct 449

<210> 10855
<211> 459
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-024-Q1-E1-F5

<400> 10855

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ccactcctaa ccatgttcgc tcgattgaca agagcagggc ggaagattgg atcgagggcg 120
cccgcattggc ctcgccgccg ctgtcacctg gattcgctag ccgcctcctt gattcacacc 180
cgtcgccgcc gcgagtaagc tccaccgttg ctgccaggaa tctcgtcccc ggcaaggtaa 240
tttcctctga atccctgctc tcctaaactc ccttattctg ctgccctact tgctgcgtgt 300
gtgctgtgtg ctgtgtgcgt ttagccatga tctccgcgag aaagctcaag tcnctcgact 360
tttacaggta ccatccgctt cccttcgat cttcagatct ccatatgtgg tgaatgtggt 420
gttttggttt ttcgtcggat tactatctgt attcgggga 459

<210> 10856
<211> 460
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-G1

<400> 10856

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gatgactcga ggcttttgcg cgaaccatgt ttgagaacgc tgacggatgc ttgttcccct 180
gtaaccagaa ccaaccatgc cggctgagcg gcgccgtctg cctgtgttac caccctgtat 240
atatttgaga tagaggcaca tgtggaggtg ctgctcaatt gaaagtgaac ccagaccaga 300
gatgttggtt actaagtggg gttgatatca taggtgcaac cccttttaaa tctaattagc 360
ttgctcacc atgtgatgta catatatgcc tgtaactcaa ctcagcccag ccctgtatct 420

aactgttttag ctgcatatta taatatagat ctgattaaca

460

<210> 10857

<211> 354

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-G4

<400> 10857

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cttcgcatcc attcgcttga cgcgcaactt cgacgctgtg caaatcacac cgccccactc 120

ctctcagctc acaacctctt cgatcctctc cgctctggcg gcgtccacac ctcaccatgc 180

agaaatcttg gttctccgca ccggcaagca atgggtcctg atacggatca tagcgccgcc 240

gcatcgctct ccgaagcctt tgacccccac ggtggccaat gagcagtcgc cgtaccagca 300

gttgtgtatc ttctcagagg cggcagtcac ggatgtggag tactggcagc acat 354

<210> 10858

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-G7

<400> 10858

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gattttctcca caaagagcac accatggcaa ttctgctgaa aacaacatct atccgcgtta 120

gttccattca aatcatgcaa actagagtcc aaaacaagag aaaaagtgtt tggaaaagta 180

gatacgatgg agacatatca actcccccaa gcttaacaca ttgcttgtcc tcaaacaatt 240

cagttgacaa actgaaagtg acaaagaaaa actttttacaa actctatttg atcttggtgt 300

tgcaaatatg tcgaaccaat gttcatgttt tcagcaagga ttatgaacta accatattca 360

caataacact taggtctcac atttactcat atcaatggca taactaacta gcgagcaata 420

ataagat 427

<210> 10859

<211> 456

<212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-024-Q1-E1-G8
 <400> 10859

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 cttgccgagg acaagcactt gcccatgtac gatgagttgt ccagcaagga caatgttgag 120
 tatattgctg gaggagccac gcagaactct atcagggttg cccaatggat gcttcaaact 180
 cctggtgcaa caagttacat gggttgcatt ggaaaggaca agtatggtga ggagatgaag 240
 agcgccgcta aagctgcagg agttactgct cattactatg aggatgaggc tgctcctaca 300
 ggcacatgtg ctgtctgtgt tgttggtggc gaaaggteat tgattgcaaa cttatctgct 360
 gcgaactgct acanacttga gcactctaaag atgctagaga actgggcact agnttgagaa 420
 agcganatac atcctacatt gctggctttt tcctac 456

<210> 10860
 <211> 452
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-024-Q1-E1-H2
 <400> 10860

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 gtctcgattc tcccttttga gctcagctcc accgaccaga tgatgatggc tgacaaagag 120
 ctcgatgtcc atggctcgcc gggttccgct ggctccacta acagctgtgt gcgggggctt 180
 gcacaggata cccagcaagt gtttaggatt ccacacaggg cagttcttga catgctccta 240
 gcacaccttg gcctatcacc ggctcagtat gaacatgttg ttcattgagga cgacaagatc 300
 catgtgaccg tctttttcaa cacctctacg ttgggtcctg gaggaccaat cagtatgaaa 360
 gtgtcatgtc gtcattccta ctgggtctatt ttatgcctaa gacatgcaaa gttgtggatc 420
 gtctgtgaag ctacatgtgc tatcgtatct cc 452

<210> 10861
 <211> 455

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-024-Q1-E1-H3
 <400> 10861
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 gaaactgttg tggcacatct tactaagttg aataacatag ccaccctttt tactcatgat 120
 gagaaaactc gctattactt tattctcaaa ttatttcctt cctcattaaa gggatgatgt 180
 aaagcttggg acaatactct tgctcctagt tgtgtgcgta gtccccagga tatgatttat 240
 tacttctctg aaaaatattt ccctactcat aagaaacaag ctgccttgca ggaaatattt 300
 aactttgtgc aaattaaaga agagagtctc ccacaagctt gggggagggt ttgccaatta 360
 cttaatgcct tgctagatca tcatcttaag aaaaatgaaa tacttgatat cttctataat 420
 ggactaaccg atgcttctag ggaacttcta gatag 455

<210> 10862
 <211> 378
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-024-Q1-E1-H7
 <400> 10862
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 cgccggacgc ctcatggggt tcttcccaa cgaatccgag gtcgcgcgct acaagtacaa 120
 gctgtagtgg tagaaggcat catcatttct ccccgtttct ctaccgcaag tggtacttct 180
 ttgcttttat ctttctctaa tctcgtgtga gcaatgtgtg gtcttggtgt aataaatggg 240
 gtgccttgct gcacagtagt gaggaattca tgccaaaaaa aagaaaagaa ataataaaaa 300
 aaaagcggcg gcccaaaagg ttccagccta acttatgctg gaaggcaagt taaaaccctt 360
 ccaaaatggc tacctaata 378

<210> 10863
 <211> 310
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-025-Q1-E1-A2

<400> 10863

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ttgcctgcta gggcaataga ctagcaggaa tggttgtttt catacgttgt gaggatatga 120
gtagaacatg gagagtcttg cagtgtttct agacgtcttt gtcccttcaa aagcggctctt 180
ttccttggcg acctctggca gatgcatgcg tggtagcggc attcggccag gttttgggga 240
cccatggtct ccagtgtatt tttttaatga cgatgggtcca tgacgttgga attttgagct 300
acggtggccc 310

<210> 10864

<211> 267

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-A3

<400> 10864

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taacactgtc acgttcatgg tcatgactag tgttcctatc agtgttgtca ggaccatggg 120
catcgcagcg tatgtgactc acattatgga gtatcgcttg tgtgtgttcg ttaatagctg 180
gtgcatgttg aaccacggca cttgtgtgct atctaacggg acatgtaggt tcatcgaagt 240
tgatggcagc atggctgagc tcatcag 267

<210> 10865

<211> 399

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-A7

<400> 10865

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tcaacggcaa tcgtttgact ggaccaattc caagggagct ggccggaata tccagcctca 180
aagttgttga tgtttctggt aataatctgt gtggaacaat tcccacgact ggaccatttg 240
agcacattcc tctcagcaac ttcgagagga acccacgctt ggaaggacca gaactacaag 300

gcctggctgt atatgaaacc aactgctaaa cggccacggg aaggtggaaa atgcttacga 360
 agtaacgggc gtacaagggt taccggagat cggggtgat 399

<210> 10866
 <211> 434
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-A9

<400> 10866

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 atgattacaa gatgggtgag aaccgtcctg tactggagca ggctcatgag ataatatgca 180
 ttgttaagga gcttgagctt ctgaagtgcg agttacgggg caagtttgtc gcgggctgca 240
 taatcgctaa gttccccaat tctcggagga actttgccac cactctgaaa catcagaggc 300
 gtgaattctt cgtggaggat gtcattggcc atctgagtgt tgggcagaat tcgagggcaa 360
 aggactcgca cggaaaatgg gccgaaagga cttctgttgc caacatgggg aagcacggga 420
 acttcaactc ccac 434

<210> 10867
 <211> 346
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-B10

<400> 10867

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 cacaggaaga gcatcaaagg cccagcccaa gacccaaacg caagcctcta cttccgtctc 120
 ggcttgcagg cctagaatgg gcccttggtc ttgtaacgat ataaacagag tgttcccctt 180
 cgggagtagg cggcggcaga tggctggtgg ctggcaagga tagcgtgtgc gtgtgtttct 240
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 agtaatggag aggtagccct gacagaaaga ctatgggatt caacac 346

<210> 10868
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-B11

<400> 10868

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ggatgtgtac aagctggctg agacaattaa atcatcttca tgttgtaaga tcactcgtga 120
acctggtcct gtcaagggag ggtccactgt gattgctttt gcaccagacc cagatgggta 180
catgttcgag cttatccaga ggggtccgac gcctgagcct ctctgtcaag ttatgcttcg 240
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gaggaagaag gatgtgcctc agtacaagta cactattgcc atgatgggct atgctgagga 360
ggataagacc actgttctgg agttgacata caactatggt gtcacagaat ataacagggg 420
caatgca 427

<210> 10869
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-B12

<400> 10869

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tgtctgcaag tacgagatgt catggcacac tgggacgcac agaggtcata atccgccatc 180
catcttcgct cttgccgagc tgaggggtag actctattgg aaggcgtttg tatttcctga 240
tacatcctca ggaagctaca ttgtggtgct catccacaat ccacaatgtc agctctcatt 300
tgcaaaggca gggggtgata agtggacctg gctaccgcct gattatctct atgatgactg 360
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<210> 10870
<211> 355
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-B4

<400> 10870

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acgtcaaagg gttcgaatc tgagcaggct gcaaagaaag tgggtgcact gaatgggcag 180
cctggatcat cgttcaacgg catgtaaggt ggaggatgat actgatcggc gtatgacaaa 240
catacacata caattcgttg gcagtgtgat cctagcagta ctgcgccttt gtggccgggg 300
aaagtcccca gcactctgct tagttctgtg catgcgggat acttgaaata ccatg 355

<210> 10871

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-B5

<400> 10871

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aggaatattt tttaacacac acgaacgaat ttaaaaattc cagtcattctt ttgaagctat 180
gaagaaattt tcaacttcct gaacattttt tcgtaaatgt gaacattttt ggaatttgta 240
aacaaaactc gaaaagcgga acttagtttg aaattatata caatttgttt aaaacaagaa 300
catttttaaa attatcaata catttttgaa aacgtgaaca ttttttaaaa ttccagaaca 360
tgatttgaaa acatgaacat tttttgaatt ggtgaacaaa ttttgaaaac agggaaca 420
tcctagattc ataacaaaat 440

<210> 10872

<211> 302

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-B6

<400> 10872

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gaggatttgg gagccggcca tgctgaagca gcacaagtgc aatgattagg tttatacaag 120
gctcctcaca acgaggaaga accaagctct cttagtcctg accctcctgg aacggagcct 180
gagcaagttg agtttgcacc tgcaacgaaa caggaagatt ctgaaggtga taggagggga 240
aaaatgcggg gcgaagagag gaaaagggac aggagataag aggcggaggc gtggaaggca 300
ct 302

<210> 10873
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-B8

<400> 10873

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gtggtgaatt aatggcagac atgcaactga ggtaagacaa ctaattgggt caagttgcgg 120
gttgacgatg gacttgcaac taatgcaaaa aaagagtcgg gacctattgc gatgacaaat 180
caaacatcaa gtcaagttag gaatcgaggg tcaacttgca gctaaagaaa aaaaagagtt 240
ggacctagtt acaagttaat agtggacttg gaggaaaaaa gggtcgatca taattgcaag 300
ttgagggtaa aattgtaact aaagcaaata gaaagaagca caaaaaaggt taaacaaaac 360
atcgactcta atgaaaaata agacgaaaat gaaaagagga gaatggggag aggcaaagca 420
gccaaagaat ggaagtgat 439

<210> 10874
<211> 322
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-B9

<400> 10874

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gatttccagg ttgctcgggt agattttaca gtttttcgta gtttagatcg agtctgttct 120
tcatacctac agtccacgaa gaaagccaca aaaaaaatta gggttagttc atcatatccg 180
aaccaatctg agcctttgca taatcttttt agggttttgc tttgttgaat ttgcggttgc 240

atcgtcgtgt ctagttgcag gtcttagagt ctagtctttt agagtttcga gttctgggtca 300
taagttgtca cgccggggcc gc 322

<210> 10875
<211> 385
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-025-Q1-E1-C1

<400> 10875

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ggtgctcgtg cgcattgcagt ccggcaagtg ctatctgttc ccctgcagtc cgtcaaccat 120
gccatgcaac tcagagacac ttcccatgcg gttcagagct cgtgcgtgtg taatctagcc 180
agtgtctgtg catgtacagt ccagcgagca tccgtgcaca gcagcgctc tgccacaaca 240
ttcagtagag gattccccta gtttggaaaa tgctaacttt tggattctaa gacgaattag 300
gtcncttaat tatgatgata tgttgctaga ccaattagtg tccatgcaca acagcttcta 360
agaccaattt tgaattaact tttgg 385

<210> 10876
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-C11

<400> 10876

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ttgctgatga cttcagatct gaacctacgg atatatgtgc ggacttgaaa atgaaccgcc 120
agatgcttaa accatattat gaccagctgg gatgcaagtc cgtgtcaaca ggtgctttta 180
aaccagtttt tatgacactt ccagcacccc tcaagttccc acaacaagtc acaaggagaa 240
ggcggcgaaa ataaccatct tagttattgg tttccatttg atatggttgt gataggaaag 300
gtatgcattg ccaccgtcga acctatgtgc cctcagctca gtttcaccaa tgtagtggag 360
aaaatgatga aggtggttgt tctgtctttg ttttctattg tcacttggga attgctacga 420

<210> 10877
 <211> 359
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-C2

<400> 10877

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 cttactttcc cgagtaggtc atccccctcaa cggccccgta acatatgaag tcttagaatg 180
 cgatcgtttg tcttttaaca ttccgtgttt tctggagtga aacacgttgc acgctcatcc 240
 tcctaagccg agatattcca tggccacaga tttcaacacg gatcgtgagt ccaacttaga 300
 cgacacagat gtcaagaaag ttcttgacga tgttcgccac ggctaagtcg aatctggag 359

<210> 10878
 <211> 420
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-C3

<400> 10878

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 aatatcaaac gaatcccaaa ttcacatgac tactaatagc aagacttctc ccatgtcctc 120
 aggaacaaac gtaactactc acaaagcata ttcatgttca taatcagagg ggtattaata 180
 tgcatataag atctgaacat atgatcttcc accaaataaa cgggcaagca tcaactacaa 240
 ggagtaatca acactactag caacctatag gtaccaatcc tagacttaga gacaaaaatt 300
 ggatacagga gatgaactag ggtttgagag gagatagtgc tgggtgaagat gttgatggag 360
 attggccccc tcctgatgag aggagcgttg gtgatgacga ctgggatgat tccccctcc 420

<210> 10879
 <211> 396
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-D1

<400> 10879

ggtatgtaca ccggccagtt cgtctactgc ggacgccgag ccaccctctc cgtcggcaac 60
gtcctcccgc tccgctccgt ccctgagggga ggcgtcatct gcaacgtcga gcaccacgtc 120
ggcgaccgtg gtgtcttcgc cagggcctcc ggtgactacg ccatcgtcat cagccacaac 180
cccgacaacg gcacctcaag gatcaagctc ccctctggtg ccaagaagat tgtcccaagc 240
agctgccgtg ccatgattgg tcaggttgct ggtgggtggca ggactgagaa gccaatgctc 300
aaggctggta acgcctacca caagtaccgt gtgaagagga actcctggcc taagggtcgt 360
ggtgtggcca tgaaccctgt ggagcatccc cacgga 396

<210> 10880

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-D10

<400> 10880

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aatcatctcg cgagctgggt aagggatgtg aggcaatttg caaagggcaa catgacaata 120
atgctagtgt gaaacaaatg tgatctatct cacaggcatg ccgtgagcta tgaggaaggt 180
aggaagtctg caaatgagca tggctctgatc tttgtggagg catatgcaaa agctgcacaa 240
aatgttgagg aggtgacaga ctgatcgatc cttgttgcat ctctgtgaaa ttaacgcctc 300
tctaggcatt ttctcatgcc atttcaaagc cagggttttg ttcagactgc tggagtcac 360
tctactccca atgtctgagt tgattgaatt gtacggttta atttcgtgca aaaa 414

<210> 10881

<211> 410

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-D12

<400> 10881

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catataccat gtgatgattg ttgctactaa tgatgtatcc acatcgtaat cctgagccag 120
catgtgtctc gggaaaacta gtttatgaac tgtgggaatt cgtggatgca tttctagtca 180
tagtaaacag tccttgctgg cacgacgttg ttctggtcag gtcagatcct ctgcctttcc 240
tttgectgct ttgctgggcc gacagaattg accgtcccca gtatgtgcat gttgttcttt 300
agtcggtttg ttccggtatt gcctggaaac aggaagatct catgtgttaa taatcatccc 360
ctgtctatga tctgtccatg cgcgtcaaga ttccgaaata acgateccgc 410

<210> 10882
<211> 123
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-D3

<400> 10882

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gctgcgccac gtgtttctc tagggaatgg tgatttccca cgtgggacca cccagttgt 120
ctg 123

<210> 10883
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-D4

<400> 10883

gggtcgacct cgccgtcaac tgcgaatact gatcagatcg agccagccta gatcaagact 60
tgaaccacaa agcaacctag acgataccag agagagagag agagagagag atggtaagt 120
tagtgcagtg cacagaccgt tatcgtcagc gtcctggatc atcaacctga cctcgtcgag 180
cgtaaagtgc tcgccggcct cgatggccag ccgctggatg tccatgtccg gcctcgatgg 240
cctcatctgc ccgaaagatg acatgggtgag taacccccaa tctgggacac ctcagacgat 300
gacagaagag agaggaggag tcatgagact gtgatagcct ggttttttgc cttcgctcgt 360
tttttcggac tttcttttgc atcgactttg gattttgagt tttgagtcaa gtcaaattga 420
cttgaacact tgggc 435

<210> 10884
 <211> 444
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-D6

<400> 10884

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tcaaaaacaa tcaacaacta atgggttcacg ttaaacact gatttcacgc gaacataagc  180
aatagcaatt gattagcact ccactataa ataaatataa atctctgtaa ttagtttatt  240
gaagcaaagt taatgagaga aaaagttatc actcaaatgt gttatctcca ccctttgtcg  300
aaagtttgat agaatctgag tccagtcgtc gcaattaggc ttgactaacc ccctacagtt  360
ttctggccaa aaaatgggta agcaagcttt tgggcctggg ttatgaccgg ctaagttggg  420
tttggtagta tgggtcgacca tgat                                         444
  
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<210> 10885
 <211> 434
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-D8

<400> 10885

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tagcaactca gccgctcacc tgcagcaaat ggaatcaggt gaaaacaaca tgggctcgaa  120
tgatggacca aacagcaaag ctaacttggc tgcgaggcaa cgcttacggg ggacagatga  180
gttgcatgaa caatttgtgg aggctgttac tcaacttggc ggtcctgata gagcaactcc  240
taaaggagtt ttgagaatta tgggtacacc aggattaaca atataccatg tgaaaagtca  300
cctacagaaa tacaggctag caaagtacat tcccgactct tcagctgatg gtaacaaggc  360
tgataacaaa gatccagggg attcactagc aggacttgat ggatcctctg gaatgcagat  420
atctgaagcc ctga                                         434
  
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<210> 10886

<211> 396
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-025-Q1-E1-D9

 <400> 10886

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 atggggggcac cgcattgttct ttcggtgtgt catcatcatc cgtcgggtgcg tcattattat 180
 attatgacga gagtcctgca tggactcaac aattatagtg attatgagaa catcatgtgt 240
 gatgttcacg acatttggcc tttcacaacc atgcacattt atcccttcac catgtttact 300
 ccagcattca tatcccaaca cgaatctcct cgtgacaaaa tgtgtctgga tctctgtagt 360
 gcttttcata ctttgcaa atcttgacactc caaaca 396

<210> 10887
 <211> 163
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-025-Q1-E1-E1

 <400> 10887

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 tcattcatgt tcacatgtga ctccatttca agaaatatcc agtggccgca ttatgccaga 120
 acgcactatc atcattctac atagcgaagt gggatatccgt cgc 163

<210> 10888
 <211> 352
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-025-Q1-E1-E10

 <400> 10888

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 tcgtagcaaa tatattagag tgtgacgcgc ccaccttctt gttttgtaca cggaccacta 120
 tggttgtttg atatgtgttt cacgtgcgct agattcgcac tcaattttga tcttcttgtt 180

gattatgatt gtgtgttttc cttttgttga tatggcttta ctggtgcaa gggatattgg 240
 tgctcagggg ggagcgagct attggttggt cactatgata ttgttacgca ccacagtgtt 300
 agcgtacatc ggtgtttcac gttagcctcg tacggatgcc acgattatct ac 352

<210> 10889
 <211> 413
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-E12

<400> 10889

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 cgtcaagggtg tgcatatgag ttcttgtaag gtgcgttcaa gaattcgggtg gtgtgagtcg 180
 tctgctgcac ttgagatgcg tcaactgacgg aagagaattg agagtggaga gcggatggaa 240
 aaggaaattg tgccttgcat ttccgttcgt gatcaagaag ttccaacgag ttcatcatat 300
 ggtaaagggtg agttgcacgt atatggcgag ttgtgttgct cctagacagg aggtgtcgtt 360
 cgataagata tgggatcgac ggcaacaaga aaatgtgaag atgttggcgg gtg 413

<210> 10890
 <211> 270
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-E5

<400> 10890

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 gggtaaaata gggacagttc atgtaaacgg atgggcactg gacatggatc tgtttattta 180
 ggtcacccta tcaactttgta agaaaactca ttattgcgaa agtattactg aaagtgcac 240
 tgtgcgtcta gcagttgcat cgtcctgtcc 270

<210> 10891
 <211> 411
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-E9

<400> 10891

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cgaatcctcc tatgtcccaa cggggtcggg cggggtaatc tgtgtcggca ctaggatgaa 120
aggggcgcgt gcttctctggc acggcagggg aaacaactgc ttcacatgt ctgaacctcc 180
ctgcgtcgcc attgccgcct ccctctctcg ctgtcgggtg cgctgcaact tccggcgacg 240
ttctccgcct tgcaagacag aaccggcgaa gtgacgccga cggacgaggt ggatctcgtc 300
tccgtcgcgg cggtcgggga caagctagac gacatctcgg gcagtggacc aggaccggtg 360
gcgaggatgg ggaacaacgg tgaaggatgg ccaatgctcg gccacgggaa a 411

<210> 10892

<211> 348

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-F12

<400> 10892

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ggataacttt tccccacgga tccttctcgt cttccacgtg attcgagtct cctctctcca 180
tcaggttttg aaggcggttt tgtgtagaac agccacggag cagaaacaac gaacatgctg 240
cttcagcaac agcgtaatga tcctgatgat actcttatca ttttggtaac gtaatgtgtg 300
ttctgtcaat gtcgctccg gatgctagct agacctactg ggtagcat 348

<210> 10893

<211> 366

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-F2

<400> 10893

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gacgagtagg ctctggtctg atctgatctg atcggcggcc ctctggtgt cgatcttggt 120
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 tcgttgtggt atcagcagcg aagatgcgaa gtcgcaatag aatgcttget gtataactta 240
 tgcatttget aaatttgcta cgccatgcat gtctgccaca cgctatttgg atgtggctaa 300
 agaactcctg aataattctg tacataatth gtaatgcttc catcagaatg gtgttccgtc 360
 gcaaaa 366

<210> 10894
 <211> 346
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-F4

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 gaacgcctct gccacaagg taagcttgag caatggaacg tggctctgact gtagccagta 180
 caggcgtcgt tgctgcttcc ttcaccagt agagaagagg ataagggtca aactggagat 240
 ccgtcagtgcc ccacaaaaaa tcgagatctg cgccgagttt cacatccagc tcaattacct 300
 agcatgggtc gtggttcctc aacaaaacat caggcaacag agatat 346

<210> 10895
 <211> 422
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-F8

<400> 10895

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 acaacgggag ccagcagttg gaggggacgg agaccgagac cgaggactac accaagttca 180
 cgggtgctgaa gctgaagcag gagctgacca agcagggggtt cggcgcccag ctgctgcagc 240
 tgaagaacct caacaagaag gacatcgctg ccttgtatga gaagcacgtc gttggcggcg 300

cttgactgcc tcttcctcaa caatatgtaa cgcacatctt taactcgtgt gctaattcta 360
gatttcgtgc agcgttgtgt gctggtgaca cgtttttaggt cagattgtga aacagcatat 420
gt 422

<210> 10896
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-F9

<400> 10896

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ggccccacag tcagacgacg acagcaacaa ggatctggga ctgcctgaga aagtcgaata 180
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tagcaggttg tattcatctt cttttctgtt atgttctgtt ttttattgga ttatcgatca 300
aaagcttgta gtttgaacca aaattacttt tttcaacttg aaaacgggct cttagtgt 358

<210> 10897
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-G10

<400> 10897

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gccaataaga attttacacg tggaaatttc ccattgggtcg gggccgttaa cgggttatcg 120
gatccaaaac ccgacctgat agcttaacag cgttccgtta cgggtggatgc cacgtgtcgg 180
tcacccttga cgaaagcact tctgtgacgc acgatttata gtcattggaag tggacacttc 240
cgtgatgata attttggtta tgtcatggaa cacttctacg acagcacagg tatgactatc 300
ttgattctat cataaaatcg tcatggatgt acatgcatga caaaaaacgc gacctactgt 360
gacaaacacg tatcatcacg gaagtgcatt tttttagtg tgatcatta 409

<210> 10898

<211> 251
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-G12

<400> 10898

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 tgtgggtctg tgggatgtgg ctgtaattgt ggtcgtacgc catgaccgga gtagctagta 180
 gtgtgcgctg cactgactgg atgcaggcag cgatgcgacg catagccgga gggagggttag 240
 ggggccaccg a 251

<210> 10899
 <211> 364
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-G2

<400> 10899

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 catcgggtgg gctcaaagtc agatgtgaga gttaattttt ctaaatacaga aacttgtact 180
 ctgaagattt tctagtgtgt ttcaagtatc aatgcgcctt tgtgttcctc cagttcagga 240
 cgtcagaact actataccat tcagtagact ttgttgctgt tcatcactat tttcttgggt 300
 tcctcttggg ccgtcagtgt ttgtaagcga tgctattcat gtacgaagta cttgcgaact 360
 tttg 364

<210> 10900
 <211> 407
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-G3

<400> 10900

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cattgatgct tcctgagata aaagatgggc tgaagagcca catgttctac tgctagtcca 180
cacacaaatg aacgaagcct gaagcctgga gaactctaaa gattttatctt caagtataca 240
tggcaacctg aagattttat tttgtttctg ttggtttgat gaacattgga ctatctctag 300
tctctttaat atttccagag aatgattggg ttatggcttt atgcaagggt atgaatggaa 360
agttttacaaa agaaaaaaaa gaaggaaaaa aaaaaaaagc gggcgct 407

<210> 10901
<211> 415
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-025-Q1-E1-H10
<400> 10901

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tcgtaaagggt gctagtcagg aggtggccca cagtgccttag gctaccaagt atcgttactg 180
atgtatctgt gcctggctaa tcatgtgcaa tgtgtggcct gctctgttct gtgaaatgag 240
ctgtgtgacc cttgatgtaa tgtctgtcaa ctttgaaagt gtcgcgtaac tatgtatttg 300
tatcttaaat acatgtcata aacctgtaac cctttgaaac aggacctgct gtctattggg 360
attactgatt aaagtgatat ttggttcgaa aaaaaaaagg gggggagaat aaaaa 415

<210> 10902
<211> 397
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-025-Q1-E1-H12
<400> 10902

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agtacaactc tgaacatccc ccttggttctt gaagattggg acgaatatac tccgtctcca 180
ttcttctggc atcttgtttg cccgaaaaat gaggttgaaa agcttggtta gccatactat 240

cgctatgtcc ccgagacctt tccacacctc aatggggata caatcagggc ccatcgccctt 300
gcctcctttc atccttttta aagcctcaaa caaataaatg ttgtgaacat gtaatttgcc 360
ctgtccacat gtaatcctct ccattcataa ataattg 397

<210> 10903
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-H4

<400> 10903

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gtggagaagc tgataacatc aaagatgata cttgctgggt cgaaccggag acttcattcc 120
gtgcaccgga actctggctt ggctgtggct gggtagcag cagacggat gcagatagtc 180
tcaagagcaa agtcagaagc agccaactat gaaaaggat acggagaacc catgcctgta 240
aaggaattag ctgatcgtgt tgctagctat gttcatctgt gtacactcta ctggtggctc 300
aggccttttg gctgtggagt tattcttga ggctatgata cggatgggac acagctctac 360
atgatcgaa cttcaggcct ctcctataaa tattttggtg ctgctctggg taaaggaaga 420
caagctgcaa aaa 433

<210> 10904
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-H5

<400> 10904

caggtctaga actcgggggt cgacgctcca cttgatcctg aggcttaggg gtggaactat 60
gatcaaggtg aagacactta ctgggaagga aattgagatt gatattgagc cactgacac 120
aatcgacaga atcaaggaac gtgttgagga gaaagagggt attccacctg ttcaacagag 180
gctcatctat gctgggaagc aactcgctga tgacaaaact gctaaggact acaacatcga 240
agggtggttca gtgctccatc ttgtgcttgc tctgaggggc ggtagtaga tgcaacctcg 300
acgtggaccg taaaggccat ttctaccaga acttggttgc agacctagat ctgtgaattt 360

gccggttgat tgaagtgccca tgtaattgac gcatttgtga agtcagctgt cacctgtact 420
 tggatgg 427

<210> 10905
 <211> 350
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-026-Q1-E1-A11
 <400> 10905

tgactcatcg gagctcgacg acaatctcgg gagcatcgcg cggtcaggga gggcggagtt 60
 caaggacgga ctcacagcag gcgcctatgt gtcgattagt agacagtgtg gtgtcggttt 120
 caagtcttcc taaatcgtct ggtaaaaggt tgtctgtgcc tagtcacgca actattagca 180
 tgtgtatgtg tgggagtcac aggctggtgt ctctgtcagt gagtcacgtg atatgtctgg 240
 ggagcttcac tataggggta ataagacagt ccactaccac aacgacgact aaatggaata 300
 tcttgaggac cgcagtagct gggatttagt gtgtagtcgt tcagagttaa 350

<210> 10906
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-026-Q1-E1-A2
 <400> 10906

cgggtgcgata ttncgaggac gccgtcgacg cacggaatgg tcgtggcaac ggcttgagaa 60
 accgccattc aagagttata acgtcacgtc ctacgtctgt catccccaga gatgtaccat 120
 cttegtcagc accaagatga acgacattga ggccaccttt tcctttgaca tggaaaagca 180
 aaagtgggaa caacttggca gttggggcgt gcccttcgca ggccgtgggc actttgatcc 240
 gtacctcaat gcctttgttg ggctctccaa agattctgac acccttgggc aagtctactc 300
 ctgctgcttg tccagctcca gcaactggca cggccttgag tgggaagctcg gcaaggagag 360
 gctgttcagt caggaccag ctgagaggca tgtatgcgcc accctagtct acgtgggcca 420
 gagcaaattc tgcttagtgc 440

<210> 10907
 <211> 291
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-A3

<400> 10907

agggctatga aaagcaatgt gtaatatatt tgcagctcac ctgatatggg taactgtctt 60
 ataaaacgat ctagctgtat agagtgtcat catcagatgt tgccaaggtt gctccaacgg 120
 aagtactcgt cttgcctcag ttttctgtga aatttccatt ggattaccta cagccgtatg 180
 aataccgtca tgtacttctc actcaacttc actgggagca ctgccaccga tgtgatatag 240
 atgggtgctga tcacttacia gatggatgcc agcagcaaga tttgcactac c 291

<210> 10908
 <211> 260
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-B11

<400> 10908

ctcgcgagtc cacacgaggc gctaaaatga ctcataggag ttctacgata ttgtcgtctg 60
 cataaagctg ctacatttat cagcgtatta ttctggagaa gaatcagttg cacttttccc 120
 caccctgtca cggatgatg atgaccgtca cctaacaatga accgtgggtt agcatgattg 180
 gcaaatgaca gactcacgtc tgaatgtgag gttggcatgc agatctacag ttgttggttg 240
 agctgttctg aactatgcac 260

<210> 10909
 <211> 419
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-B12

<400> 10909

ctcgcgagtc cacggcgatc acatcaggca ctccataggag gattaccatc ggagtgccca 60
 tgggtgtgagc ttgggctatg ccagcacgga ttttggtctg aaggcgagat cctggagccg 120
 gacgctgtct tcagaggatt ggcacgactg ctttgaagta gacacggatg atatcccat 180

gacagatgaa gtatgttctg ctttgttccc tgggccacgg gacgatgaga aggtggagga 240
gccatcggtg agcgagctga tctgctacgc tcccaccctg agtattgagg atgatgttct 300
ctacatgatg tccaagctga cccttgatcc aaggaaccct gtggcatggg tagctgctgt 360
tgacatggaa aagaaaacac tggaaacttat ctctgttaat gatgaaattg catcccgta 419

<210> 10910
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-B2

<400> 10910

cctgccccgta cgggtgccgat attccggggac gacgaccact ggccacctga tctataagct 60
tggcggcatt gacaagcgtg tgatcgagac gttccagaac gaaccgctg aaatgaacaa 120
gaggtctttc aggtaccctt ggggtcgtga caagctcaac gccgaccgtg acacgggtat 180
caccatcgac attgccctct ggaagttcca gaccaccaag tactactgca ccgtcattga 240
tgcccctggg caccgttact tcatcaagaa catgatcacc ggtacctccc aggttgactg 300
tgctgttctc atcatcgact ccaccactgg tggttttgaa gctggatatc ccaaggatgg 360
ccacacacgt gatcacgctc tccttgcttc gactcttggg gtgaagcata ttatctgctg 420
ctgcaacaat atggacgtca ccactccc 448

<210> 10911
<211> 372
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-B7

<400> 10911

ctgatccaac aattgaaggc tagatttcac cagaggcaca ctaatatcca agtcaacctt 60
cacatactcg atggcacacg actttagtgt ttagatccaa ctaatgaatg acagaacgac 120
gctttttgcca gaacgggggt tttgccaac caacatagga aaattgacgt gtgattgtat 180
ggcaaagcca cgatgatcga agaagctctc taacgcttgt accagattcg acagcattag 240
tcgtgcactg cacgctagca ttacaccgct acagagcgctc aaaactccta tggggcaacc 300

cgccacctgc atgtgtgaac taatcctaaa tgggaccctc cacaaatcat ttgatgggtc 360
catagaatgt gg 372

<210> 10912
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-C1

<400> 10912

gggacgacac gacagaacgg gggaagcgat cgatggtacc tacattgaca agaagtgccc 60
attcactgga actgttgcca tcaggggcag aatcatagct ggaaccgcc acagtgccaa 120
gatgaacagg accatcattg ttcgcaggaa ctacctcat tttgtgaaga agtatcagag 180
gtatgagaag aggcactcca acatcccagc tcacatctcc ccctgcttcc gagtcaagga 240
aggcgaccat gtcattcattg gccagtgcag acccctgtcg aaaaccgtga gattcaatgt 300
cctgaagggtt gttccagctg gaaccaccgg aggcgggaag aaggctttca tcgctgctta 360
agcccaggct ctgattcatg agtagttcat agtcagacgt tttaagcact taaacctacc 420
aagctgctgc tgttttgcca tttg 444

<210> 10913
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-C12

<400> 10913

tccacatggt tccccacatt gagtcatcat agaagcaaat cgctcgcgag atttctgttg 60
taacaacaag aagagtattc gaaaggattg cggttcgtcg tgtttcacia agaacagcat 120
ggaagcttct caaagatgct gcaaaatcgt caaagaggaa agctatgagg gggatgtcaa 180
ttccagaata cacatactgt gttgccagaa caactttccg aggtaagatt tacctgcagt 240
atcacttttc cttttgtaaa ttattattca attatttttc tttgttcaaa cagcgcatgc 300
attgggagta gctgctactt gggttgtaca atctgtcgtc caggtgtaca aatgttttat 360
tcgtcaacct gataatgatg acgatttgtt cgacgagaag gaaaaactca aaatgtttgc 420

gagaag

426

<210> 10914

<211> 455

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-C3

<400> 10914

cgggacgacg ccgctttcta tatttagtct tattatTTTT ttttgcaaT tttatactta 60
tttggtcacc ttttaaggta aaccggcatc tcttgatcca gccaggctat atgtcttcat 120
ctcaacctgg tgtttcttaa ccagtggtgg catacagtta tcatctgtta aagcatataa 180
tcaatggtga actggcatct ttcaatccgg tctggctttg actacctgtc gctagtatga 240
tcatccggtg ttcatacaca cccgggttta cttcttacat accagcattg catggtggaa 300
gttggttatt cacccttact acaaataagt tggtaaaccg acagcataat ttcatatcac 360
acgtattatt tattttttgc tatttttaca accttggtta cctaccaagt tgtgtaatgg 420
gcattatgac ccatccggtg gtaaaccgcc cggac 455

<210> 10915

<211> 405

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-C4

<400> 10915

agctgaagga gaggctggcc aaagtgtacg aggtgaagga cccaactgc atcttcgtgt 60
tcaagttccg caccacttc ggaggcggca agtcctccgg attcggctct atctacgaca 120
acctgaatc tgccaagaag ttcgagccca agtaccgccg catcaggaac ggccttgcta 180
ccaaggtaga gaagtcacgc aagcagatca aggaaaggaa gaacaggaca aataagatcc 240
gtgggtgtgaa gaagaccaag gccggagatg ccaagaagaa ataagaacat ttctgtcttc 300
atctattcac tatcagcctt tgcttggttt aggacggtat ccctgtggca atgttgctga 360
gtgcttaatt atgactagaa aagactttgc catttggtgc aatct 405

<210> 10916
 <211> 338
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-C5

<400> 10916

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 acccctgcaa aaccagctgg tggcaagcct gtcctatcg aaccaattgt ggtaaccgg 120
 aaggcgaagc tgtcatctga agtgatgaaa atgattgact cagcaatagc tggctctgag 180
 aatggatata caccagttat gtcagcagaa ggttcagggg gtgtttactt catgcaagac 240
 tcatcaggcc agaagaatgt tgcagtgttt aagccgattg atgaggaacc tatggctgaa 300
 aacaacccaa ggggtcatcc actgtcgact gatgggga 338

<210> 10917
 <211> 347
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-D11

<400> 10917

tgcgagtcg acacaaggct ctagagttag tcatactagc cgagaagggc gaagatctga 60
 attgcaggat acatgcttcg gtcactttcc ttagatgtga ggtcgtatat cttcaccagg 120
 agtgtacttt tcgaggacgt accgcacgtt agaaggctga tgccacaca gacgatgtac 180
 cgtcagatca ggctctctgg caagatccac tggtagagat ttcagctccc atgtggaaag 240
 cctgggtgcc attcctcaga aggaggcatc ctccatcccc atgtcgagaa ataggttgac 300
 tcatcccat ggtcatccac ggacaatgct gtggtccatc gctcagt 347

<210> 10918
 <211> 398
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-D3

<400> 10918

ctcgcgggta cgacatcatt cactatagtg aatcgggata tctgtgagct ggctgagagt 60

gtgggctccg ggaaggagag ctccgcgccg gaattggagc tgtctgcggg gaaactcaat 120
ccgcacgcac catggttggc aatgaggatt cgtattggat cagcgagtcc atttagatgc 180
agcgtggtca agttagccgg actgtgggcg cccgcaataa taaaagagat tgggagacca 240
tgcagacctg ctactgcaa gaaccacggt gtacagggtc actcgagatt tttttgtac 300
aagccgggtg aaatgagact ggggttcagg gcttgaatcg gagttcctgc caaatggtta 360
gacagttggg ttcgaattcg ctccagttgt gcatcaca 398

<210> 10919
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-D4

<400> 10919

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gacagccgcc gctgtcgtca caaggttacc taatacacca ccatcattcc caggaaaatt 120
ctataggacc aacatacatg cttcagctgc tcagatcaac tcctccatt cgctgcgtc 180
cctcctctca atccaggacg cggatctccg acaagaattc tttcgcatcc aatcggagtt 240
tgcggaaatc atccatcaag atgtccttca tacctcgggg aagttctacc tcaacaacct 300
accgtccaac agtgacatcg acacaatgct acaaatgcat gctgacaaca accgttattt 360
catgactccc acgatagact gcagcttcat ccacgct 397

<210> 10920
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-D9

<400> 10920

tcggaggttg aagattttgc caagttgtca tttgagaaaa acgaataaag gaaagaaaaa 60
cctgtttata tctcaattga tgatggtaaa tcaaatgcta ccgtggaacg cttacagcac 120
ggctattgtg tcattcctag cgacaagaag tttttggttc tgtatgcttt cctaaaaaag 180
aaacagtcta ataaggctct ggtgttcttt tcatcatgta gctcactaaa gttccatgcc 240

gagctttctaa attttctcca gataggggtgc gaacatatcc atgggagaca aaaacagcac 300
 aaacgaacta caacattctt taactttctgc aacgcacaaa aaggcatctt attatgcacc 360
 taatgtgg 368

<210> 10921
 <211> 404
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-026-Q1-E1-E12
 <400> 10921

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 agtttgcgga aatcatccag caagatgtcc ttcgtacctc ggggcaatgc tagctcagaa 120
 atcaggcgtc caatagtgc atcgactcaa tgcgacaata tgcaggctga taacgcccgt 180
 tctttcatga ctcccacgat gagagggtgc ttcattccaag ctccggctgc ttgagtcaag 240
 tcgaaagcag tgatactgtg tccagttctg aaacatcgat tgggtcatgt tgtaattaaa 300
 cttaaatgaa cttgtagtat gtctctttgg ttctgagagt cgttcaattt agatgtaatc 360
 gatgcgaata ctgtcttgca tttctcttcc gatcgctccga tgca 404

<210> 10922
 <211> 431
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-026-Q1-E1-E2
 <400> 10922

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 gcctggcaac gcagcctacc ttcttttgc atgctgctct agcagtggct gtttcattgc 120
 ttcttatgct atattgtgct ccacgggatg ggcagacgaa cataatgatc tatgttggtg 180
 tttgctctgt tatcggatcc ctacaggtaa tgagcatcaa ggccgtgggc attgcgatta 240
 aacttaccat tcagggcgta aaccaggctg ggtatttcca gacgtggatg tttgtgacgg 300
 tttcagctat atgcttaatc atccagttag ttacctgaa caaggcattg gatactttca 360
 atacagcgct ggtttctccc atctattatg ccatgttcac aaccctcact attttagcaa 420

gtgccataat g

431

<210> 10923

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-E4

<400> 10923

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gccaacctc cgcctccttg ctcaaaagta taatgagaac atactagtct gcctcaagtg 120
ctatgcacga ctaccacca gggccatcaa ctgccgttag aagaagtgtg gccatagcaa 180
tcagctaagg gaatagaaga ggtttatgtc caagtttgcc aaggcttcct aaacgttgga 240
aatatgctga atcagccgtc caacgtcata catattggcg tttaagttct gtcccttggt 300
tgaagtcacg ttggatttcg cagaatcgtc taacgtcgtc atatataatg gagtctaaga 360
tttgtccagt tgatagtcct gttggatttt gaccctatgt aagctttggc atacattacc 420
tagc 424

<210> 10924

<211> 161

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-E5

<400> 10924

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tcgagcgaac gggggaagag ggaccgctcc ttctgcatcg ccgcgagccg ctgcagcctc 120
tggcgacttc acgcccttcc tcgtgtcagg ttttggtgcc a 161

<210> 10925

<211> 473

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-E7

<400> 10925

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 acatcttaat atctagcccc atattaagtc gttgggtttat ttttttgtga gggatatctga 120
 tgggtgggttt ctacaacctt tttttaaaatt gtgcatatgg tagaaattac aggtgggtgcc 180
 ctacaaagga acagttgccca ccagtacaaa agaattagat tatgatctat gaaaaaagca 240
 caagttttaca tatgtcttgg gagttgtatc aatgttcctt acatgagaga ttattttactc 300
 agataaaaat aagaacagta gtcttttttg gaggaacaaa gtatgctgag ataaatatct 360
 gaattctttt ttcattgttg actgggagat attgggttaga aagctacttt accgtgtcac 420
 acatggagaa gaagacgatt ggaaaatttc ttccaaataa ttacgaagtc atg 473

<210> 10926
 <211> 346
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-E9

<400> 10926

cgacttcgac gtcaagcgaa atcagcagct catcgaaaga cgggacacct ccgcctctat 60
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 cgagtctgtt cttcatacct atagtccacg taaaagccac aaaaagaaa attaggggta 180
 gttcatcata tccgaaccaa tctgagccgt gcacaatcct tttatgggtt tgcattgttg 240
 aatttgcggt tgcacgctcg tgtctagatg ctgggcgtag agtctactcc tttagagttt 300
 cgagttctgg tcagaaattg tgacgccgcc ggcggaccat catcat 346

<210> 10927
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-F1

<400> 10927

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 acacgttatg gtgccagttt gcgtaagcag atcaagaaga tggaggtgtc tcagcactcc 120
 aagtacttct gtgagttctg cgggaagttt gctgtgaaga ggaaagcagt tggaatttgg 180

ggatgcaagg actgtgggaa ggtgaacgct ggcggtgctt acaccatgaa cactgccagt 240
gcagtcactg tcaggagcac catccgtcgc ttgagggagc agactgaagc ataagttgct 300
accagcagtg ttttgccta aggaattatc tgttttttgt agtttagacg atactttgga 360
ttcagttctg ttggctgttt agtcaacggt atcattgtac ttggtgccat ggatgttttt 420
gttaaggtat tcccccc 437

<210> 10928
<211> 206
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-F10

<400> 10928

ttcccaagtc cacagtggca tgtgatgaag tcaaagtcgc tcgttcattg tgaagggatg 60
gtgatcgccc ttgcttgag agaagtgatg gcgatgacac gatgacacca atgtgccacc 120
tcgacatgtc ttctttgtag tgttatgtgt cggttacctg gccggtgccg ctccgttga 180
ctgttaatgc ttttggcccg gttttt 206

<210> 10929
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-F11

<400> 10929

tccacattga tcccataat ggtgcctatg aaggtctcaa cacagagctt catctgttga 60
atgagagcac cgacgatcaa gagcagtttg cagggacata cagtacaatc atgcatgcat 120
gggaagagat ctgaacgaga cttttgttta gattactacg gctactagct agtacacaag 180
tcaattcatc agagactaaa ccgacgaaca aactcaatac gcgtatggat acattataag 240
ttgaaccag gaagcacaga tcttagcagc catgcaatct ccccaaatta acccatcgat 300
ggatggcat ggtataatta accaatacta ttaaggagta tgtcagttgt agagattgag 360
atcaaccgca gctttacgta cgtaaagtgt ttaccctgat gcagatggat gt 412

<210> 10930
<211> 337
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-F12

<400> 10930

gaaactaagt catagcacga ggagatcgcc aagctcacct ccagctagaa gaagatgcaa 60
gaggagtatg cctgctcccc tcgaggagat tcccaagctc accgctgcct gctgggagaa 120
gatgctcccc ttgaggagat agatatccag gctcatcgca ctatacggag ccatgttttg 180
gccccaaagt tcttgaagtg taatgctgct tcagccgtgt ctttctgccg tgtcgtcct 240
caaatgtagt ggtaacttaa aacgtgttat atatgtacat gtttgattcc gatgacatcg 300
gggttttctt ctgttctact atctgtttga tctgcaa 337

<210> 10931
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-F2

<400> 10931

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aatcgaggcg gaggagagag gggttcgctc tgtgagctca cagtgagtcc aacatgcgtg 120
agggagaggt cgggggatgcc ctgtagctcc caaatcggcg gcgaggatcc atggtggctg 180
gcgatgggaa cggcgatgct ggcgaagttg tggcgcgtcc ttcactccat ggcttgggtg 240
agaggacgag gaagacgcgg cgggtgctttt tgaccacagt gcacgacgtg gggtagccgg 300
tggccgtgag aacagcgagc ggtggtgaca agctctactc gggttcctct agtcttgcca 360
gacacggacg aggacgaggg aatgaggcca tgggtgtcgg tgggagtgtg tggcgtcgcc 420
taagcgcat 429

<210> 10932
<211> 458
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-026-Q1-E1-F3

<400> 10932

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atgtgctgct tgccgtgact ggtatggatg gcaccgagga atttgaagat gcggggccaca 120
gcaaggatgc caaggagttg atgaaagatt acttcattgg ggagttggac ttggacgaaa 180
cacctgacat gcctgagatg gaggttttca ggaaagagca ggacaaggac ttcgccagca 240
agctggcggc ttacgctgtg cagtactggg ccattccggt agcagcagtt gggatatcag 300
ccgtgcttgc tatattgtat gctcgaagga agtcatgac gggttatagg tgattgaagg 360
accattttgg ggtaaccaac acatttatag ctgggttatgg atggagagat tatgtacttc 420
tgtccanagg ggaagacaca ttgctgtatt gagccctt 458

<210> 10933

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-F8

<400> 10933

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tagaagcatc acatttttta aaggatgact gcctagtaat gaactgcaca gtaggtgtcg 120
tcaagaaccg tctcgaaca ccatagaata tccagattaa tgttccccca tcggatattg 180
gccgttgctt caaggagctc ttcgaactcc acattggctg tgacataact tttgaagtaa 240
gtgatgagaa agtccaggca catgaatgga ttcttgccgc tcgctccccg gtgttcaaag 300
cccaattctt tggacctatt ggtaaacctg acatgggcat agttgttgtg gaggatgttg 360
aacctatcgt cttcaaggca atgggtcaatt tcatatattc tgatgagctt cctagtattc 420
atgaagtagc tgggtctttc tcaatgtgg 449

<210> 10934

<211> 267

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-F9

<400> 10934

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tcatgtgact agtagtaatc atactcaaag ttttttagtca ggccctattt ggaacgtgac 120
tactactagt cagcactaaa tgtctcaata ttaaattctt ctctctccct tccatttatc 180
tctcttcaact cacttgtgca acaacaatta tcgctatact cacgcgcaag gaaagaaagc 240
agcacagtcc tgttcctttt ctccctc 267

<210> 10935

<211> 410

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-G10

<400> 10935

cgttgtgcat ttactttgac aagtagcttc atctcgcagt tccacacgac tttcattttg 60
cacgtttttt taagatcata gaagagtaga tctacaccat cctcgtgagt gtacatatgc 120
atatgcgtgg tctgatttta gacactcctt aattattcct ctaggctttt tatcccacgt 180
cctgttacac tgaagccatc gtcggtgtgg ttctgctega tctcctcccc tgcgtcttgc 240
tgtagtggcg tcatcatcgc caccgttcac ctccggcctcc tctcctacag cctactgcac 300
tgatgttgtc atggcacgca cactatattt cttctcctct atcctctgcc tcagaaccct 360
gcgattcttc cctccgcata aaccttttgt gtggtgacga cgctaggaac 410

<210> 10936

<211> 412

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-G12

<400> 10936

ctcgcgagtc cacgaatgtc atcatattga atcgcaagct ttcggcttca cccagtctga 60
ggtactaact cggatgaccc agtagtaaca atcacagagg tgctcccttt accgcctagc 120
cgaacaatcg ggaatgtagg ggtaagcaca ggagccaggc aaccagctt ggcaaaaatc 180
ttaagtcaaa ttgatgcata tttatggctt tataacgatg attacggaag gcaacccttg 240

tatattaaat acaaattggcg atgatatggt tattttgact ccgttgcgac cgtttatcag 300
 ttgaaagtgg cccatcgctg gcttctaccc cttttagat actacgcatg gtgtcccccc 360
 aataacaaga caacccttag ccgacgtctc ggtgccccaa agcggttggt tt 412

<210> 10937

<211> 398

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-G9

<400> 10937

cttggacttc attaccatgg attactctag aagtttgcca tttggattcc ggagtttgaa 60
 ttaccataga ggtgggcatc tcacagaatg tgggtgttatg cagacgagca tagctctcgg 120
 atataaatga atgagatgct cctgtatcga aaagcacaga tgccgggtgg cgattaacaa 180
 ggagcgtacc gagaacgacg ttgggatctt cttgagcccc ttccgcagaa acacaattta 240
 catgggcacg agcagtgggt gccggcttgg cgtacaacac tttccctgtc ggctttccgc 300
 agccaacagt ttttctgtc tggttggggt tggtttgggg aactcgcgc atatagtggc 360
 ctgattcccc acacttgaaa caagtcacgg aactggta 398

<210> 10938

<211> 233

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-H12

<400> 10938

caccttgac atccaactac gaccgtgcaa gacgtcgcgc cttagcaatc tctaaacaa 60
 cctccgaagg gttattgacc acaccggagc acgatcaacc tgaccacgag ggtctgttcc 120
 ctgcgagcaa acgaagaaca agcaagaaac tgagattgca atttggatat tgccaatata 180
 agatgaaagc tttattgatc aagggtgggt tccataaccc ctttgccggg ttg 233

<210> 10939

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-H4

<400> 10939

ttccggaacc acttagacgt cgtgaagtct aagtcgcatg acgtcatcat ataaaagttg 60
attgaatgtg actccgtttc ttgttctgtg ttcgctacag accacatggg cttttgttta 120
gctggagacc acatgggctt ttgttcggtt gtgttgcaact catccatcgt tgtgtttttt 180
ttttatttag ccacctaata catgcattgc tacactgtgt aatggagctc cgattttgtg 240
gctagcttgc ctcatgttcc gtccttgca ttogtgcac cttgttacac cttttcgttt 300
attatttaaa acaattactt tatatttaaa aaaggacaca ttttttttaa tgtaacaatg 360
aaataacagc caaaaattca gaagaagaca attaatttag ttgggtgcaa acataggata 420
tacaactatg tgctgtcaac tagcgtgcaa at 452

<210> 10940

<211> 375

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-026-Q1-E1-H9

<400> 10940

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agaagacttg aagctcgacg ccgaaccgcc ttgacttgca aacaggcang aagggttagag 120
attctatgtt ttggagagac agcgggttcac ggacgaagct tgtctgcttg ctcatgtttc 180
tcgtgcctca tttcaaccat gatcactcga tgcagtttgt tatcaatgcc ccatatagtt 240
tcacaaagaa aagaggctct ccacagtaaa tcatgaaatg caccgcgatg ctgccagcgc 300
ttgctcaagg atgaaggatc atggcgccang gcaaatgaga cgcgatgcaac cggtacctgt 360
ctaagctgat catgc 375

<210> 10941

<211> 302

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-A1

<400> 10941

gggccgacac gccacgtaaa acagactact gtcataaaaa tgaaaagaag cagctctgct 60
 tacggagata agttgtcccg aaaggaatct ggaaattatt tcacctactt ttctccatct 120
 actgaagatg aagatgtctg cccaacatgt cttgaagatt atacttcgga gaatcctagg 180
 atagtaatgc agtgctcaca tcaattccac cttggctgta tctatgagtg gatggaaaga 240
 agtgaggcat gccctgtttg tggaaagaaa atggagttca acgagacgac ttagacctca 300
 ga 302

<210> 10942
 <211> 433
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-A10

<400> 10942

ctcgtgggtc gacacgaaac acaactatgt cagtccttct acaaaatgta cgagcggctc 60
 gggctcttgcg tgcagcggcg gcagcaacat cagcttccat tgaggccaaa gtgttcgcca 120
 gaattgtcct taggaatctg gaacaccatc aggcaggagc ttcaacctga agacacaatg 180
 gcgagcacia gcgcgacgaa ttctccaaca gggatgact tctaaccttt ggccccagaa 240
 tggatgcaaa ctgcgggtta agttgtcgcc ggcatttgaa gctgccgcgc aagctgtgac 300
 cttggaactt ccaccttgag gagaactgtc agaagagatg aatgaacgtt caaccggcag 360
 ctgttgagtg tgcaattttc ctgttgtttg tctgatgtgt aaaagtaact taaaaagtgt 420
 tagcgtagc atc 433

<210> 10943
 <211> 435
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-A11

<400> 10943

gtccccgggtc gacacgaaac gataaaatga cacataggag gttggcctat gaagattgca 60
 ttggcaatcg gcgctgttca tagatccaac cacccttttg cttgatgagc caaccagcaa 120
 tcttgatcgc aaagcttgtg tctggttgga atagaaatta tgcaattttg agcctagact 180

tggtgttatc tgcattccc aacattttct aaatggaatg tgcactatca tcagctacat 240
gcagaacaag accctcaagt tatatactgg aaattatgat cagtatgttc aaactcgtc 300
tgaacttgaa gagaatcaca tgaagcagta caaatgggaa cacgaacaga tagctaatat 360
gaaggacgta cattgtccga tttgggtcatg gatctgcgaa acttgctcgt caggctcaga 420
tcacagagaa gactc 435

<210> 10944
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-A12

<400> 10944

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tggacgccga tgaaggagac gaccaagaac cagcacctat agggcactgg aaagccacgc 120
catcatacga tgtatacatg gtggacacac ctaaaagaaa caacgacgag gatcaaaagg 180
gcgcaaccag gaatcgctcc ctcgaaaaac aatcaaagcg gcagcgtaag cgccgcgcca 240
agccccacct cgacaaagac ccagccatag agcatggcga atcaacggaa gatgaacatg 300
ccatcgagca accgtccaaa cagggcgagg aaaccaaaaca atcagtcctc gggaaagata 360
atagtccgga cgacctcagc ccggacaagt tgccagaaca tcagaacctc caccaaaggc 420
tcgttgccac tacacgt 437

<210> 10945
<211> 360
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-A2

<400> 10945

gggtcgagac cctcgggaac atcaacaggt cggggaccaa ggagtcatg gaggcctcg 60
ccgccggcgc cgacgtgtcc atgattgggc agttcggtgt cggtttctac tccgcctacc 120
tcgtcgccga gagggttgtc gtcaccacca agcacaacga cgacgagcag tacgtgtggg 180
agtcccaggc cgggtggtcc ttcacgtca ctcgtgatac gtctggggag cagctcggca 240

cggttaccaa gatggctctc gacctcaaag acgaccagat ggcatacctt gacgagcgcc 300
gcataagga tctagttaag aagcactctg agcttatcag ctaccccatc tccctgtgga 360

<210> 10946
<211> 203
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-027-Q1-E1-A3

<400> 10946

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aaggtgggggt ttcgcggtctg gagcggagag gttatgacgg ccggatttcg aatggcgaaa 120
aggaggcgat gggagggagg aaccatgact tagggacgcg cttgtccaaa atgtanggtg 180
tgttacaaaa gtacccccgc cga 203

<210> 10947
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-A4

<400> 10947

gtctaggaca cgcggggccga ccatggcgtc taccaacact gggggcatcc ccatcaaggc 60
cgaacaggat tcggatggct cggcccacag cacagctgac atgactgctt ttgagcaaaa 120
tcttctagtt cagatgcaca ccaggttcca aaccatgtca gagaacatca tcacgaagat 180
agatgaaatg ggtgcaagaa ttgatgaatt ggagctgagc atcaatgacc tcaaggctga 240
aatgggcagc gatggtatga cccctactag agtgaacgac gaagaatcaa agccagcaga 300
cagctcttcc tgagtgaagc agaagtagca gaagcaaggc gtattagtct tggttccatg 360
tcgatatcat cagccattca tcactaactt actgcagggtt agga 404

<210> 10948
<211> 309
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-A5

<400> 10948

ggccgacttc taacaacatc actgatgggtt acaacttcac gtctcttcat gatcagcttc 60
agctgtaatt tggttccagc ctaagcaacc gaaacctcaa cttgcaaatt gtccaagtat 120
aagggcaagc cagccaaaag taggtaccaa tatgtgtcag gctgatcatg cgagagagta 180
gactactatc aaatacccag ttacatgtac ccaatttacc gagcatatca tagggcacat 240
gtaccaaaaa tggtatatca gacatttagt ggaagatcac aaacttctga aaaaaatgct 300
gaagcatct 309

<210> 10949

<211> 263

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-A9

<400> 10949

atgacttcaa tgatcttgac atcgatcgca caaagaaagc ttggtagagc gaccacgtag 60
gggagacata tgagactgag gatggaatgc atcgatcaat atgcagtggg gcacaaccgt 120
tctttcagag agaacctttc acaatccgca tgagtttctt cagctccata gccagatatt 180
gacctgtcgc ccagaacctg ggttgctctt ggtgtccaca aaatatctgt gcaagtctaa 240
ggctggaagg gaccagattc cgg 263

<210> 10950

<211> 389

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-B1

<400> 10950

cgggtcgaga cttagaaacc aaacacacag cacgacacaa gatcggcatg acaaaacaac 60
ctgcgatcaa gatttgcttg acattgagtg aacatatgac atagtgaaaa aaagctcata 120
aatttaaaac agataaataa aaataaaaag gaaaaataa aaataaatgg aaaaaggaga 180
aaaattatat ttaaataaaa aaaatcagga tttctaatag ttcataatta aaaaataata 240

ataaaataga aaaaataaat ggaaaacgga aacaaaataa aacaaataca ggggtgtcata 300
 tggaagtcca caaaaataag aagaactagg accgattcat ggcagacttc aaaaaagaaa 360
 aaaaccataa aaaaaaaagc ggccgctct 389

<210> 10951
 <211> 307
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-027-Q1-E1-B11
 <400> 10951

aactgtctac aaccattggt agtcatgatg tacacaagat catcgattca gctgtaagac 60
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 aaaggggacg atcgtttgag aatggatcaa tacagtttca tcatggaaat cacatcatga 180
 tgaccgcagc tctcttctat gtgaacgtac ttacatgat tgatategac atgtcatgtg 240
 atcatatcat cgctactcac ggtctcgaaa cttgttacac actgttctat ctgtgttcag 300
 tcttttc 307

<210> 10952
 <211> 423
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-027-Q1-E1-B2
 <400> 10952

gggtcgacct ccgtctgcag cttcatgcca tcaatgtggt actaatgcac ataatacacc 60
 tatgatgctg cgtggacctg aagggccaag aacattatgc aatgcttgcg gcctcatgtg 120
 ggcaaataag ggcattgtga gggacctatc aaagtctact ccccatctc ttcaaattgg 180
 gtcaacaggt ccaaattgata gtcagaatgg aaacaccctc tctcagcaga atggaagcac 240
 cctctctcag caaaatggaa atgctgccat aatgcccttt gccgagcaac ataaccacgc 300
 atcagcgacc gatgccaacg gtcacggcca tgggtcttca acaatgatga gcgggattgc 360
 tgcttggttt taacggtgga tggatgaagg aacgtcatcc tctccttga gtgaacctcc 420
 tgt 423

<210> 10953
 <211> 242
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-027-Q1-E1-B3

 <400> 10953

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 ctgcttcctt tcctgtggag atgtgttcat cggcgtgtaa tttttgtaca tatcgactcc 120
 gtgccatttg gtcgctgtaa gacgcctcaa tgccatgca gcaagtgggt ggagttgtga 180
 gtttctgaat gtactgggaa tatgggtgta gtgatgtcag cataagaatg tcatgggagc 240
 ag 242

<210> 10954
 <211> 404
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-027-Q1-E1-B4

 <400> 10954

 gggtcgacga gattgtcaat cctgggtccg tatacttaca caatatgttc ccctttgaga 60
 gggtcatggg agtcctaaag aaatatgtcc gtaaccgcgc taggccagaa ggaagcatct 120
 ccatgggcca tcaaacagag gatgtcattg gggtttgtgt tgacttcatt cctggcctta 180
 agaagatagg tctccctaaa tcgcggtatg aggggagact gactggaaaa ggcacgctat 240
 gagcggactc aataatatgc agggacgggc attcttggtc tcaagcacac tacacagtct 300
 tacagaactc taccttgggtg accccatatt tcgatgaaca caagaatagt ctgcgttcca 360
 gacacccgga gcagtgcgac gactggatta catgtgaaca catc 404

<210> 10955
 <211> 442
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-027-Q1-E1-B5

 <400> 10955

ggtcaagaac tcgcggggtcg acattaaaca cgaaatggag tctgatcatg aaaacagggga 60
 tgtgaagttg acatacaaga ctctgaagga aaagatcaag gaaatcaaca agaaggatgc 120
 caaattctac agcaatatgt tcgctaagat gaccaagcct tcagcagaag aaagcaaagc 180
 ttgaactgga gcagtagcca aaggaaggat aggagtcccg gagtgcgctc aaggaaggggt 240
 cagcttgtct gctcagctct atgggctggg tagatcacac atgtgcttgg agttgctata 300
 gactagagaa atttcagttt tgatattgcc aggcgatatt tttttcttgt caagaacaat 360
 gcatgtttag agctttgcat attacagtgt gtgctttccg ggaaatagat ggtcctgcct 420
 taagaatctg tgttgtgtgc ca 442

<210> 10956
 <211> 420
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-027-Q1-E1-B7
 <400> 10956

gtctagaagt cccggggccga ctgataagga aagcatgaat agaggaacgc gtgtagggga 60
 aggtgcacta agggaagttg eggcttatat tctcgaccat gcagttgggtg atcgtgaatc 120
 gggtcacggg gttgggtttt ctgggtgtgcc tcccacagca ttagtccgaa gcttacatag 180
 gggaaagagc ttcaagtttg gatctctgca gatgtttatg gagaacgatg gaagttgcga 240
 ggatatgggt ccccggtgctt ttccagtgaag ggaggtacac aaaatagcag tgttagatat 300
 taggttagcg aatgctgacg gtcattgcag gaacattcga gtgtccaagg aagaacgtgc 360
 cacctgcaag ctgattccaa ttgatcatgg ctactgcctg ccagacaagt ttgaggattg 420

<210> 10957
 <211> 338
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-027-Q1-E1-B8
 <400> 10957

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 ataagtacga cctggccacg cccccccccc tcacaagcac accatacagc ggtgacgtac 120

gcgacatgac atatatatat atggtgggga cgagcttatg acggcagtgc ctgtgaatgg 180
cccttttggg cgggtgcaggg cgctgcactc atcagtaatc taccgacaca aggtcctcag 240
tgccatcacc tcccgcctcc cctcgacaga tgggtgactgc caagcacatg atctctctcg 300
ctggcggggc ttgcccacac actccattca gcttcgaa 338

<210> 10958
<211> 172
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-B9

<400> 10958

ctaataaata cgattttcat cgttcttttg cacatcatta tcagcgcaac gctcttctaa 60
gtcacgggat tttaaattat caatatcgtc ttgtaatgtg aatacatact cgctactccc 120
ggctctctaga cttttgagta tattttctat cattgatctg tcttttcagt tc 172

<210> 10959
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-C1

<400> 10959

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ggcttgccat acaccttggc caagagaagc caacaacaat ggcagcatta acaggcctca 120
tgaccactt ttgtgcgggc gatgacagct ggctatcccg atgcagcacc agtgacccaa 180
gtacatccga agttagagat ggaaacggga aatcacgacg cagcagaaat aataagtgcc 240
ggaataaaga atacaacccg attgagcatg gcggtaaca ccggattcag atgctctcgg 300
ccaggtcagc aaaagccgcc tctaaaagcg ccggagatga actgtccagc ctaaacaaag 360
ttctggacca aatatgtcag atccatagca ccctgataa acctgcaaat cata 414

<210> 10960
<211> 241
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-C10

<400> 10960

gtacgtatca catcgaaaga cgggacacct ttgccactac caggtggtat cacatttcca 60
ggttgcttgg tgagatttta cagttttttt tgtagtttcg accgaatctg ttcgtcatgc 120
gtagagtcca gcagaaagcc ataagcaagc ttaggatgag ttcaccctat ccgaacacat 180
ctcagccctt ggagaagctc ttctgtatct gcattgatga agttgctgtt gcatcattgt 240
g 241

<210> 10961

<211> 289

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-C12

<400> 10961

tccgggtcga cgagcacagt atcgcggtta aggtccacac gagtgatata atgatgcggg 60
gtccggtcac gagcgaagaa atatcgcgag tggtcacgga gcttatgctc ggagaggccg 120
gaaccggagc ggcaaataat gttgccgagt tatcggtgct ggccatggag tccgtactgg 180
agatggggtc ttcgtgcaaa gcaatggatg agatcatccg tgagttgtgt gcaccaaca 240
tcatgcaggc acacgttgac gcgagcaagg aggagtcctt agatgttta 289

<210> 10962

<211> 276

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-C2

<400> 10962

ggtcgacaca aatctctaga ctgactcgac ataggaccga caagtggagc gcgttttgac 60
aggcacctgt attatataga ggtcatgatg tgtgtgtttg tgcaccttac tgcatatata 120
tatacacgta caaggaaagg caagacattt ttgcttgga cgagacggag cttgcttgtg 180
tgtttgcttt gcgtttgttg ctgtttatac ctaaggccg gtcggatcgg atgttggttc 240
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<210> 10963
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 <212> DNA
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<223> Clone ID: LIB31-027-Q1-E1-C3

<400> 10963

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 tcggacgatg aagagatggt ccagatcggc ggagatcttg atgttgcaag gcatgctctt 180
 gtgcaaataa ctacaatgct gaaagccaac ttctttgaaa gagaagggtgc tttatcaggt 240
 tttccacctg tgatcccaga gcaccctttt gctgctagt gtgcccgatg agccaaagta 300
 tctaagcaga gacagtaagt ctgctgggca cgattatcca tattcgattg gatatcgtgc 360
 atcagacgat gtgcttcttg ttgaccgtta tgcagattat ggcagct 407

<210> 10964
 <211> 338
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-C9

<400> 10964

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 cgaggattcg tggatacatt ccagagatac gccgggccga tcagtcgtga ccttctgtgt 180
 cctcctcttc ctcggtcggg gtggactggc gtggatcaca ccagcccggg cagtcatggt 240
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 tcgtgtcagg aacatgtatc ggaccggtgg ctatgcta 338

<210> 10965
 <211> 426
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-D1

<400> 10965

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cagctgagcg ggcagtcgcc agttttctcc aaagcgaggt agactgtcag gtctttcagc 180
attcgtcgta agtagaagat tgcttgctat gtgacgatca ggggtgagaa ggcaatgaag 240
cttctctaga gtgggctgaa cgtaaagag tacgagctct tgatgaggaa cttcagtgc 300
actggttgtt ttgggtttgg tagtcaggag cacattgatc ttggcatgaa gtataacat 360
caaccggcat ctatggtatg gacttcttcg tggttctgga gcgagctgga taccgcgtct 420
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<210> 10966

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-D2

<400> 10966

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tgccggcgtc atgccattg agaagatgca gattttcttt ctggttctct agattggtct 120
tgataaagct ttcatacagg atgcagctta agctggagtt cgtcgctaag caggaaacat 180
ggctatcaat tatcttgat acagaatgtt tgggactgga tcttgtaatg aaagctggag 240
cagaagaagt ccaggacgga aaattcggct tccacggcaa tgccgacgtg ctcccctcgg 300
gttctgcag ttcgaggacg gacagcccag gttctcaagc agcaaagtta gcgcacaaag 360
ttgaactttg ctgctgcacc atcgtcaaca ag 392

<210> 10967

<211> 177

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-D3

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cactgagccg gcaatccatc cttccgaagc tacgatgtcc ttccaaaaaa gccaaaggccc 120
acctggttga aacccttgga acccttttaa ggcaatttcc ttaaggactg aaaaacc 177

<210> 10968
<211> 396
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-D7

<400> 10968

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gcccagacca aaggagttca ccaacgtggt cattcggacg gccatcgggt ttcgtcctca 120
tggggctcct cggggtcctc cttcagcctc aacttcattc caatcaaaac aatcatctcc 180
ggttccggcg aatccctctt cccaaggtaa ggggcccag gccaaaagga tgttttcaat 240
ccatgaaggc gcccctggtt tcctaacccc cttaccttaa accaatcaat taaggattta 300
attgttaaga gaatttcctt ttgttttcca tttgaaacag ttgtattggt agacctggag 360
cagttttgaa ccttattccg gctagaccgt aatata 396

<210> 10969
<211> 271
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-E1

<400> 10969

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gttcgtcgag tccgtccgcc agatcttacc gagctatggc gtcaatcggg aggagggaaa 180
gacttcgcgc gcacccatt gttccaagct taagggtttg ccagaatccc acatgcggca 240
acgacagaga gtactccag ggttcctatc g 271

<210> 10970
<211> 219
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-E2

<400> 10970

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tagaatgctt catgtgcttc acttatatca tttgaacttt ggattgcctg tttctcttca 120
catataatac cggcatttgg acaatgctct tttgcgtcag ttactatctg ataaagcgtg 180
ggcatagaat ttgtatacag agtggaagtc ccttgcttc 219

<210> 10971

<211> 333

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-E3

<400> 10971

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agacgaagtg gcagcgcagc gtggaccctg tgttcgagga gttgttatat tgatatatac 120
tgatatcata tataacttcg gtggacgctg gacaacgtgg acacggtctt cagattgtat 180
ccccatacaa aatcccgctc ccaattctac aagccacctg accagggaaa cctactctcc 240
ggctctgtgg ctgctaccaa ttttgaacgc ggaacactct gtttgtggcg ttccggccct 300
tcttttttcg gccagtgtcg acctttttaga gct 333

<210> 10972

<211> 308

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-F2

<400> 10972

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gttgggttta tcatctacgg tttatcgatg ctgaggagaa tttctaagtt gggcctaadc 180
acttggctct attgccacct atggtttaat gcagcaggaa taaaggggca tttgatccta 240
cttaattaag tactaagata ccccgccct tgcatataa gcaagtaccg catatgtccg 300

atttttag

308

<210> 10973
<211> 268
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-F9

<400> 10973

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tgagccgaca cgtgtttcct ccagccaatg atggttgtag acgtggaata tccccattgg 120
tcggggctgt taacgggtta tcggatccaa aaccgagccc gatagctgaa cgggtgtcca 180
tcacgggtgga cgccacgtgt cggtcaccct tgatgaaagc acttctatga cgcgcgattt 240
atcgtcatgg aagtggacac tttcgtga 268

<210> 10974
<211> 365
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-G4

<400> 10974

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gtttcctgcg agcaaacgaa gaacaagcaa gaaactgaga ttgcaatctg gatattgcga 180
atataagatg aaagctttat tgatcaaggt ggggttctgt gacgcctttg tctggtcggt 240
gaacacaaac gaagtacgag aagttgcagc tatggcgaac ttttaatacta aacaaaaccc 300
aacgaaaagc tactagatgg atctacttac ataggactaa ggggtggcgg ccaaggaggt 360
gggag 365

<210> 10975
<211> 287
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-H10

<400> 10975

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gcggggtttca tcccctacgt caactcatac acagagatct acatattggc caagtgttcg 120
tcgatctgca accctgttta agagctggat tggacgggtcc aattcaacac ggaactatgt 180
gtctgttgaa acgtttcgtc tatcaagtgt cgctcgccg cctccggaca gccgacgac 240
gccctcgctc tcgccaagct ccaactcctcc atgaggtgat ttgtttc 287

<210> 10976

<211> 299

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-H11

<400> 10976

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cgtggacca aatctcctgc agctcgcgt caggtacagc gagaagaaga tggctcgccg 120
caagtgtac gctcggcttc ccctgaggtc aagcaagtgc cgcaagaaga agtgtggcca 180
cagcatccag atgatgcca acaggaggtt catcaacaag ctttcgaact tgacatcgaa 240
tcggtagggg agagagaagg gaaggaccgt ctgtgactaa attgtttcat tcggtttag 299

<210> 10977

<211> 300

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-H2

<400> 10977

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aaggacttgc agaaagatcc tccgacatca tgcagtgcag gtccttctgg tgaggatatg 120
ttccattggc aggcaaccat tatgggtcct cctgatagtc cctatgctgg aggtgttttc 180
ttagtgaata tccatttccc cccggactag cccttcaagc cgccgaaggt atcgttcaag 240
acaaaggtct tccatccgaa catcaatagc aatggaagca tatgccttga cattctgaag 300

<210> 10978

<211> 322
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-027-Q1-E1-H4

 <400> 10978

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 gtaatgtact ttgctgggat tttgtgtttc tccaaggccc accacatgac attccgctat 120
 atcttaccat aggccttctc caagtcaatg aacaccatat gcaagtcctt cttttgctcc 180
 ctatatctct ccataagctg tcgtaccaag aaaatggctt ccatgggtga cctcccaggc 240
 atgaaaccaa actgggttttt ggtcacgctt gtcattcttc ttaagcgggtg ctcaatgact 300
 ctctcccata acttcattgt at 322

<210> 10979
 <211> 347
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-027-Q1-E1-H6

 <400> 10979

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 tcgggaccga gcttgaaggt cctccttgg cccatgagat gagatatacct ggtggagacc 120
 gcacctctga catatggatc taggaggaat ggtgtacgac acaggcacct ggagatccat 180
 ggtgttgagc tcaactgtaat taaaatggtc tcttccccgc ctgcggtggt gtatgtgatg 240
 tggatatcaat tggaataagt tcctgataga acccctgaca ttggcttcat gggagctttg 300
 ggccctaata agagttgcct ctgattctga aatttctgat gctgttc 347

<210> 10980
 <211> 440
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-028-Q1-E1-A12

 <400> 10980

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catgggttata cctcgaagag tccagcaatt gtcaatctac ttgagatcat gacggaattt 120
 actccggagc aacaacatgc attctgccag tttgtgactg gtgctcctcg gcttccacct 180
 ggtggccttag cctccctaaa tcctaagctg actatagtta ggaagcactc ttcgactgcg 240
 gcgaataactt caaatgcagc tggagcagca gagtctgcag atgatgatct gcctagtgtc 300
 atgacttgtg ccaactatct taaacttccg ccatactcga caaaggaggt tatgcacaag 360
 aagctgcttt atgctatcaa cgaatgccaa aggtcgtttg atctttcata gtgggttcaa 420
 aactaacata catgcaccag 440

<210> 10981
 <211> 429
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-A2

<400> 10981

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 agtactgctg tatcttgtgg atgctaacaa cgattttcag tacatggtac tgttgtccgg 180
 gtcaaggaag gtttacgccc agcggaccta gatgtgctgg atgttttata ctgtataaga 240
 ctacgcatca cgtgctgaat gaatgttgct gagactctag tatcgcagtg tgttgacgac 300
 gccacttgc ttgggctccc gttgttaa at ttgccacgct agctattgat aaagatgggt 360
 ttcttgttca atttggatct tgctggcggg ttaatttcat catgagagga aatatccgca 420
 tcagttttt 429

<210> 10982
 <211> 387
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-A8

<400> 10982

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cagcgtggtg gaccgcgggt gctgcgggat cggccggaac cgcggggtca tcacctgcct 180
gcccttcctc cgcccctgcc ccaaccgcaa cacctacatc ttctgggacg ccttccaccc 240
caccgagacg gtcaacgtgc tctcggcaa ggccgcatac tccggcggca ccgacctcgc 300
ctaccccatg aacatccatc agctcgccgc gtggcaaccg tagtttcttt gagtgaggaa 360
ctaagtacct atagctaact agctacg 387

<210> 10983
<211> 428
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-028-Q1-E1-A9
<400> 10983

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cgaccagaga tgtacaacga cgacaacgga ggtagagggt gcggatgcaa agtaaggggg 180
ggagtgggtg agtggaagga aatgagtccg ggaaggggat ttaatgggcc taggatgtca 240
gagtectacg tgactgttac ccggattccc gcagcccccc cccccacgt tgtctccact 300
ttgcgggaga aagtgcgtcc agaccgcttg gtggaccgac ataggcccat gttggatggc 360
acaacacgtc caaacctgtg ggtccaaacg gttgcggaga gtcggcgatt ggagatgccc 420
ttagtggtt 428

<210> 10984
<211> 337
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-028-Q1-E1-B10
<400> 10984

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gacggtggct gcatacgaga atgcggacgc tgagaagatt gtccagatca aacgtgccga 120
gggtgaagca gaggccaagt acccgtctgg cctcggatc gcccgccagc gccaggccat 180
tgtggatggc ctgagggaca gcgtcctggg cttctcagtc aatgtgcctg gcaccactgc 240

aaaggatgtg actgacatgg tgctgatcac ccagtacttc gatactatga aagagattgg 300
 cgcgctcctcc aagtcctcgg ccgtgttcat cccccat 337

<210> 10985
 <211> 398
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-028-Q1-E1-B11
 <400> 10985

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 tatctagcgg gagaggggag ggagcgttgg aggaaccgga tgaagacgag tttcatcgtg 180
 atgatgctca tcgtgatgac cgcagctctc ttctatgtga cggtagttta gatgatcgat 240
 atcgacttgt aatgtgaaga caaactcgct actcgcggtc tcgagacttg taatataatg 300
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<210> 10986
 <211> 433
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-028-Q1-E1-B2
 <400> 10986

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 gcacgacaaa atcaagttga aaccaaagtc cactactatgt ataaaacatg aaaaatgggt 180
 taatttgatc ccagaaaggc acacaatgaa atcaaaatgc acgagtagac aagcatttga 240
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 gacacctttg atggtgattt tttgagggtc ataaacaaat atgtcgtggt gttgtagcat 360
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<210> 10987
 <211> 181
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-028-Q1-E1-B4

 <400> 10987

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 gtggagctgc cagtgtcttc ttagacttgt cagtggagct ctatggttcg tcgtcgacgg 180
 t 181

<210> 10988
 <211> 374
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-028-Q1-E1-B5

 <400> 10988

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 atttagatgg gtgttttttc gttccatcat ttctgcgcgt cgtctaggat taatttgttc 180
 tgtaagattg agatcacaga gtgcgagtag tacaaataaa tagagttctt tgagaacttg 240
 ggggacgctg agtattctcc tcaacattga taaatatctt tgtatgtgca tcaactcaatt 300
 gtcagtgagg agaatacgct gaatagcatg ctaccctagc cagaatcaat taatcaagaa 360
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<210> 10989
 <211> 355
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-028-Q1-E1-B6

 <400> 10989

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 actgctgtag gggttctcca cgcgccaata gctatctttt ggattgctga acgtcgtctg 180
 tgggtgtaatg tgaaagtttg aggccatgat ctgaggtgta attgtggggc cgtgagagga 240
 gttcagtgtg tgtgtgtgtc tcttgcgtgca ttggccacag gaacatacta cgtatttgta 300
 aatagctaag caactatggt ggatgtgcac agacattggt gaaatggctg catct 355

<210> 10990
 <211> 422
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-B8

<400> 10990

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 acagggatgt actatctgag gacacgtgct gctgccgatg cgatcaaatt cacagtggac 180
 actagtcttc tcaaggataa gaagcctgcy aatgctgagg aggaagagga tctccaggct 240
 aagatggcgc gcaggtgacc tgctccctga acaaccggga ggactgcttg tcatgtggaa 300
 gctagattca tccgcgacac cctacgctaa cctatactat cctcttactg ttggcttgctc 360
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 aa 422

<210> 10991
 <211> 249
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-C1

<400> 10991

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 aggaagccct ggtggacatg attgactggt tcaacaagaa cctcaagtga acctaatgaa 180
 ttggcgccca tccttttgta ataagccagt gtcactcttc atgagtcacc acgcgagcat 240

ccacagttt

249

<210> 10992
<211> 95
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-C11

<400> 10992

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ggggggcacc cgacgttggc acaatgcact caggc 95

<210> 10993
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-C3

<400> 10993

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tgggttgcta gagtgcaga agcttaaacc ctagtttatg cgttgcttcg taaggggctg 120

atttggatcc atatgtttca tgctatgggt aggtttatct taatactttt gttgtagttg 180

cggttgcttg caatacaggt taatcatatg tgggatgctt gttcaagtaa gaacaacacc 240

caagcaccgg tccaccacaca tatcaaatta tcaaagtacc gaacgcgaat catatgagcg 300

tgatgaaaac tagcttgacg atattctcat gtgtcctcgg gaccgctttt cctatcataa 360

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<210> 10994
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-C4

<400> 10994

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cacttggtac gaagctcggc tccagccaat ggatttcagt gcattcccta ctgtttaccc 180
 taaagtcctt caacaagata acgatattga ttgtggcatt ttcactatga aactaatggg 240
 atggtgcccc aggaatccaa cccctatagt tttttcacca aaaaatgtcc cagatgcaag 300
 gatccgatat gctgttgatc tcatgttcag ccactacaac actttggatg acgagaagaa 360
 gcgtgtcaag gagttccgcc tatagacatg aaaaagtgtg gacagctcct aaaagacacc 420
 actcacaatg acaagaggag cta 443

<210> 10995
 <211> 393
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-028-Q1-E1-C5

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 aagccctggc ggacatgatt gactggttca acaagaacct caagtgaacc taatgaattg 180
 gcggccatcc ttttghtaata agccagtgtc actcttcagg agtcaccacg cgagcatcca 240
 cggttttatgt tatgggtctta gctatagcct atagggcatg cgtctttgtc tgctgcaggt 300
 ctgctgggat gtgtgtgctt gctcattttg gggctctgctt gtgctgaaca ctgaaactat 360
 tgcactcaga taaaatgtgg tatttgcatg ttt 393

<210> 10996
 <211> 230
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-028-Q1-E1-C6

<400> 10996
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 acgatatcga cgtatgcaga toccaaattg aaagcttcat cgaccgctgc aggactgctg 180
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<210> 10997
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-C7

<400> 10997

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tgagcaatca attatcgaaa ctgaaatacc agctggaata tgaacaaaag agagatatgc 180
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agctgaaggc tgaggctgaa gactggaagt tgaagtcaga tgaatgtgag acagcaattg 360
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tgaagttaaa ggaaggacag ata 443

<210> 10998
<211> 200
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-C8

<400> 10998

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gatttcagtg cattccgtac togtttaccc taaagtcatg caacattatg acgatagaga 180
ttgtggcatt ttcactaaga 200

<210> 10999
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-D1

<400> 10999

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 acagtttttc gtacctgaga ttcagtctgt tgatgggtacc tatattccag gagcaggcga 180
 tttacagaat gacggttagt tcatcccacc cgaaccaggc tgagccttgc atagtctttt 240
 ctgtacatgc tgtgctgaac tcgcggttgc accgtcatgt gcacttgctg gtcttaccgt 300
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 tatctcccct gttagecgacc acaattgc 388

<210> 11000
 <211> 444
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-028-Q1-E1-D10
 <400> 11000

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 tggcgaactc ccttctgtgc ttgcggagcc aatcatctgc tactatcggc tcggtgctac 180
 tgaaaaacac cgggtgattt agcctaagaa aacgggctaa gtgatcaaca ggtgggtggg 240
 gtgggtgggtg tttgttgttg ttgttcccct gattctgatt ctgggctagc aactacatca 300
 atgtgttctg ctgctggatc aactgggtga gctccggtgg gaaggtaaatt ccgggggtcac 360
 gtctcgagg catctgaagg ttagaaaag atgagattta agaatagaga ggggtctaga 420
 gagaaaacac taccatattg caca 444

<210> 11001
 <211> 395
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-028-Q1-E1-D4
 <400> 11001

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gtggatgccc acagcatatc accaccctcc gtcgatgtca acagcatatt accacccgct 180
 gtggatatgg atattgacgg ggaggaagga gagatcggct gctgtgggta gcattttttt 240
 ccttgtgatt tgtttctcat acgtattgtg taccaacacg atcgtacatc gtggttataa 300
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 actgttgtgg tattcagagt gagtttctcg aatgt 395

<210> 11002
 <211> 354
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-D6

<400> 11002

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 tttgcattgg tttgtactga cctatctcac gagttcttga tgagtttgtt gtgaatgaag 180
 cttttgagaa gtagagaacc catgatatga cacgaattat ggagacacac aagctcaagc 240
 ttggggaatc ccaagtcgcc ccaagataat atttactaa gtcgcaggca tcaaagcgtg 300
 gggatgcccc ggtaagtatc ccacctttct tctcagcaa ctatcggtta ctac 354

<210> 11003
 <211> 438
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-D7

<400> 11003

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 ggtgcttgac aagctcaagg ccgagcgtga gaggggtaac accattgata ttgccctctg 180
 gaagttcgag accaccaagt actactgcac cgtcattgat gccctgggc accgtgactt 240
 catcaagaac atgatcaccg gtacctcca ggctgactgt gctgttctca tcatcgactc 300
 caccactggg ggttttgagg ctggtatctc caaggatggc cagacacgtg agcacgctct 360

ccttgctttc actcttggag tgaagcagat ggtctgctgc tgcaacaaga tggacgccac 420
cactcccaag tactcaaa 438

<210> 11004
<211> 303
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-D8

<400> 11004

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tccttgggga tcacagcgca tcacgttcta ccgagtaatc gttaggtata accctatgct 180
tcttccatat caccagatta ttatgaacca tcgttgacat caatggacac cgttacttca 240
gatggatcag catcagcggc agtccatcat cagagtgtgc tgtgcgagc agagactcca 300
gtt 303

<210> 11005
<211> 408
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-D9

<400> 11005

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catctccatg ggccatcaaa aagaggatgt tatcggtttt tatgttgact tcattcctgg 180
ccttaagaag ataggtctcc caaaatcgtg gtatcagggg agactgactg gaaaaggcac 240
tcttggaagt gactcaataa tatgcaggga cggatattct tgggtctcaag cacactacac 300
agttctacag aactctacct tgggtgacccc gtatgtcgat gaacacaaga acagtctgcg 360
ctccaaacac ccggagcagt gcgacgactg gattacatgt gaacacat 408

<210> 11006
<211> 57
<212> DNA

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tctaaacaat tt 372

<210> 11009
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-E7

<400> 11009

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atattgtcagg tgattttctag tgcaaactac tcaataatct atttatgtta tccagaacaa 180
aaataacttca cacacttttg tgttttgtct aattgcagggt gtatgggata tttgtacaat 240
ccacatatga agataaggca aaaggagaag tttaggttct gttcaaaaag tcctctcacg 300
taacttttgg gccaaagagaa gatagagtcc aagtctctca cgttctggat tcagattcgg 360
actgcacaga catacctgac tcaaaacgcc aacaactttt tcatacggac tccgaattgg 420
gtgattcctt tttg 434

<210> 11010
<211> 264
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-E8

<400> 11010

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agcctttgag acagtagttt agcaatgtat ccacgccaac tttcctaaca gctagacaga 180
tacgtgttcc atttgggtcc cgtacatcaa gatgtccagt gcactcaaga cggcatcgta 240
acgcatcatc agtttacaag tgat 264

<210> 11011
<211> 424
<212> DNA

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 tttcttgta aaaaaaactg atgttttagag cgttgcatat taaagtcatt gcattccggg 360
 a 361

<210> 11014
 <211> 437
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-028-Q1-E1-F5
 <400> 11014

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 gtcctttgca accgtggctc tgaccatgat tgttccatt tgattccatt tctcgacaa 180
 gttaaagcac ttgtcttcta cagaacaatg catctcctca acctctattt tgatattcct 240
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<210> 11015
 <211> 422
 <212> DNA
 <213> Triticum aestivum
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 <400> 11015

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 caggcgtgcc gatggtgaag cagaggccaa gtacctgtct ggctcggta tgcgccgcca 180
 gcgccaggcc attgtggatg gcctgaggga cagcgtcctg agcttctcag tcaatgtgcc 240
 tggcaccact gcaaatgacg tgatggacat ggtgctgatc acccagtact ttgatactat 300
 gaaagagatt ggcggtcct ccaagtcctc tgcggtgttc atcccccatg gccctgggtgc 360

ggtagcgac atcgccacgc agatccgtga cgggtcttctt caaggccagt ctgcctctga 420
ca 422

<210> 11016
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-F7

<400> 11016

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cagctgagat cattgtcaac ggcgtgtccg gctaccacat cgatccttac cataatgaca 360
aggcctccgc actgctcgtg gacttctttg gga 393

<210> 11017
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-F8

<400> 11017

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ctaaaactga agatagggca gattgttttg attatgatta cttggagatc tcgtggcttg 180
ctgtccatgg atcagtcata cctacggcaa catcaactca ttgattctag aggccatggt 240
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atgcagtaga tcaaaccata taatgcaact gacttctcac atgacttatt tcctcctgta 360
aaacttcttt ctcatccatg taatctctgc acatctcaaa tctccgtccg ccttaacctt 420
gattttggca cata 434

<210> 11018
 <211> 286
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-028-Q1-E1-G10

 <400> 11018

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 gtatggcata aatacaagag ctaggcaacc catcttgccc aaaacttaag tcatatcgat 180
 gcatataatg gcgaagaaaa tgtacatgcg gaggaataac acatgtgcgg ggcatgaagc 240
 ccagatagat aattaagctt ctgtgtaaga agccccagc tacaat 286

<210> 11019
 <211> 425
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-028-Q1-E1-G11

 <400> 11019

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 cacaggaaga gcgggatcat tctacacgct cgtgagtgc cattcttaa gttgtatcat 180
 tgattgcata tatcaatata agaatttgca attgctaaca ccaaggagtg gtcttttagtg 240
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 ggccaagcga cccttgcgaa cgggagtacc tccattggta tgtgctaaat taagatagct 360
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<210> 11020
 <211> 415
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-028-Q1-E1-G4

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<210> 11021

<211> 199

<212> DNA

<213> Triticum aestivum

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gcattgttgt gggtagctgt atttgcttcc agtgatttag ccgtgtagca gcagaatgtc 180
gttacgcttt cctttcatc 199

<210> 11022

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-G6

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cattggtgct ctccagtacc tcaactctgac tcgactggag atctagtagc ccgatgaagca 360
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 ccgctatatc tgtggcacta 440

<210> 11023
 <211> 430
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-028-Q1-E1-G9
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 atttgttgtt taatctggac ttcaggctga aagtgaacct acggacattc cgggagctac 360
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<210> 11024
 <211> 428
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-028-Q1-E1-H11
 <400> 11024

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 tccatgaaaga agaggtgcgg gatttgcttg accctgctac tgttactgct ggcaaagtgt 240
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 gggaggggtc aaacggggtc ataacctgt cggggctgac tatgaaggca tcggtggcga 360

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gggtgcgt 428

<210> 11025
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-A10

<400> 11025

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catcagtgat tttacaccag acgggttcagg gaaa 394

<210> 11026
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-A3

<400> 11026

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tgctcacaca ccatatatgt tgaacgatgc tagctgatgt accaatgtga tgttgcttgc 180
ttgattgatg actggttgtc attaactaga aaaaagaata agaaaacctt gtcaatttat 240
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ttgcttgctt gcttgcttgt agcactatca agtgtgggga aatccagtac taggatgtgt 360
ggaactggg 369

<210> 11027

<211> 407
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-029-Q1-E1-A4

<400> 11027

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gtttgggccc tcttgatgga ggtaataccc tacgtcctgc ttgattgttc ttgatgatat 240
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tggtatgatt gtatgttgtc ctacgaacta aaaccctcag gtttatatan acaccggang 360
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<210> 11028
 <211> 366
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-A5

<400> 11028

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ctatcccccc tgattcaccg cggcttgatt gttgaataag gagcttagtt agttagtact 120
gtaagaagct cttgctaaga gctgagggca ggagaaaaaa gagaaggggg tggctgttga 180
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tggtgttgtt gctgatactg tggtcagtggt ggctgggtgg tgctgcgaca aactgtgtta 300
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<210> 11029
 <211> 393
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-A6

<400> 11029

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atcaacgaca tctttgagaa gctcgccggc gagtccgcca agctcgcccg ctacaacaag 180
aagcccacca tcacgtccag ggagatccag acctccgtcc gcctcgtcct ccccggcgag 240
ctcgccaagc acgccgtctc tgagggcacc aatgctgtca ccaagttcac ctccgcttag 300
atagtatgtt ccctgttgtc caagtggatc gatgtttgct ctgtaagtag ctgttcgtac 360
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<210> 11030

<211> 422

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-A7

<400> 11030

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acgatgctat ctgatgtacc aatgtgatgt tgcttgcttg attgatgact ggttgtcatt 180
aactagaaaa aagaataaga aaaccttgct aatttatttg aggagaatcc ttatcccatt 240
cattagacaa ccattactac tacttgtatt tgcattgttg cttgcatgct tgcttgtagc 300
actatcaagt gtggggaaat ccactactaa gatgtgtgga gctgggacgc tgttgatca 360
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<210> 11031

<211> 244

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-A8

<400> 11031

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 acgaaaggga cacactgtat tagggtgatt gcacctctt gaaggcagtc tgagcctagc 180
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 gtcg 244

<210> 11032
 <211> 391
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-029-Q1-E1-A9
 <400> 11032

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 tttcatagtt ttgtttttct ctttcttgag tcagatgaaa caccgtactg ttaaaggggg 180
 tcaaggaaat actaaggaaa aatttccatg tgatgctcaa ctcaaatcc tacgtctacc 240
 aatcccttcg agtgaagcca ttggaaatct catacagttc agtcaatttc atcagtgata 300
 gagacgaagt tcttctgggc tctgaggaat ttgtcctgac tgacgagtta cgaattcgcc 360
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<210> 11033
 <211> 392
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-029-Q1-E1-B1
 <400> 11033

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 gctggggtcg gctggccaga gaactaacca ccctggaagc tgttgcctgg aggaaattga 180
 ctgttgagg tgagtgagg ccatctcgat gcaacttcag tgcttgctgt gtagggaatc 240
 gtgtcgttct ctttggcggg gaaggtgtta acatgcaacc gatgaatgac acgtttgtgt 300
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gccgctgggg ccatacacta tcgtgcctaa at

392

<210> 11034
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-B10

<400> 11034

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ttctttcaac cctcttggtt tggaaatcct tggctgtcca gtagaacaaa atgcttgtag 180
attttgtagg gatggtgtgt attgcagtat ttagcattta gcttaacaaa atgcttgtag 240
attttgtagg gatacttgat ttgtgggata cttgatcttg caactgtgac ttgactaata 300
gagtagaaaa tatcttatta acgaggagag acaggcagca gcacgacgag gattaagggg 360
agtagcagca gtagcatgac tctgcataga agtggtttcg aaaaagctcg aacagcaatg 420
agcttgtttt atttctgat aaggctatat 450

<210> 11035
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-B11

<400> 11035

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ctttgatcaa ggccatggag gaagcagatg tgaaaaccaa atgggagAAC agctcatggg 180
gtaagaagct tgttgtccag aagagaagag catcgctgaa tgactttgac aggttcaagg 240
tcatgttggc taagattaag aggggtggtg ctatcaggca agagcttgcc aagctcaagg 300
aggttgctgc ttagaatatc ctagtggtatg gcatgttgag ttttttgttc caagttggat 360
ctgctctatg ttccagtgtt cttaaagcca gaattagtag aactgttttc agcgaactat 420
ttcatatttt gt 432

<210> 11036
 <211> 394
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-029-Q1-E1-B12

 <400> 11036

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 aggaaaaagc cacaaataag agttagatct agtcatcctt ggtccaagcc agtctgagcc 180
 tttgcaattt tcttttcatt gcttgcatag ttgaattatc ggttgcatcg tcgtgtcaag 240
 ttgctagtct tagtgtctag ttcgtttaga gtttcgagtt ctattcacat tagtcacgcg 300
 accgctgcat cattatctct tctgctgtcc aacacgcac catcaatttc caccacgtgc 360
 taccaccat tcattgtcat aacaatagtt gaga 394

<210> 11037
 <211> 432
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-029-Q1-E1-B2

 <400> 11037

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 ccgtttttgcc tccctgggta gtgggttcta atttctcccg ctctgggcct ttctttatct 120
 gtttttttat gtctgagttg tttgtttggt tgtattttta ccaaaggga aaagaaacta 180
 cacatgaagc ccatctgtac caaataaaat gacgagaaat cctttcggtc cttgtttctt 240
 ctacattctt cttctttttg tcagaatgag cctcaattaa aaaaattgca cgcacaagtc 300
 ggcttgggtct atgtgtgtgc gcattttggg tagatttggg ttcaattggg gaaacaatca 360
 gctccgttca tcagttataa canaaacata ggttctcgga acccgacggc ggctacttaa 420
 naaacgatc ac 432

<210> 11038

<211> 413
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-029-Q1-E1-B3

 <400> 11038

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 acagacaggc cggcccactt aatgggttatt cagcttcata tctttttctt ttttagtatt 120
 ttgttttcag atcttggttt ttcttcgagt ttgtttgcac acttttttat acgttttgca 180
 ataagcggta aacaattttt cagtcacaca ttgaattcat ttattataca atgatttttt 240
 aatagacgct caacattttat ttataatata caatgaacaa ttttggtata tgcactgaac 300
 agtttaaata tacaacgaac tttttaaat acatgatttt aatatacaat ataaaattat 360
 aatataaaat gaactttttt ataaaacaaa taccaaattt tttctaaagt ata 413

<210> 11039
 <211> 408
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-029-Q1-E1-B4

 <400> 11039

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 gccccccctc gcgaatggaa gttgcatagc acaataatca tcgccggtga tatgatcgat 120
 gattggttgg atgatcggat aattgagcgc gaggaacaag gagtggttgc caaggctgta 180
 aaccgcctc cagttgaata cgcctggccc aacgaagcta ggatctttct cgaacacaaa 240
 gcatccatag ccatcaatgt cacaacgcc ccatgcattg tactgcatct ggtttgatgc 300
 aatggtttgg tcaatttggg acgtgcgaat gagcatgaaa tgaccgccgt cagctgaaca 360
 agcgataaaa cacaacccat cggctggtat gattccaggt cctggaat 408

<210> 11040
 <211> 427
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-029-Q1-E1-B5

<400> 11040

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cagaatggta aagtttatac tccccctcca ccaaaaagca tcaatccatg gcttgctcga 120
aacaacgagt ggctccaact aacaagagtc ccatggggag ttttgtttgc aattattttg 180
atttagtttg cataaagcat gggactgggc atcccgggtga ccagccattt ttctcgtgaa 240
tgaggagcgg agtccactcc tcttgagaat aaccgccta acatggaaga tacagacagc 300
cctagttgat acatgagcta ttcgagcata caaaatagga tatttatttg aaggtttaga 360
gtttggcaca tacaaattta cttggaacga cgggtagata ccgtatttag gtaggtatag 420
tggaactc 427

<210> 11041

<211> 361

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-B9

<400> 11041

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gcagctctta cctcaaaagt tcacatgacc gacttacacg ttcatttcga acacttcggc 120
acgaccgcac aagcgccatt ggataatgcc aatcgtgaga gcatgatcac tcaggttcgc 180
agctgccaac agtctatcat gtcactgcc ctgtctgcta cgtgatcact catctcgac 240
gcagtcgctg cgacggctct gctgatagtg tcatggatga cagcccgtac tctaattgta 300
acgatgactt cagtaatttg cgagcaggta attatgcgga taacactagt caggtgacca 360
c 361

<210> 11042

<211> 385

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-C1

<400> 11042

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aaccaactcc gagaggttat tgaccacgcc ggagcatgat caacctgacc acgagggctct 120
gtttcctgca agcaaacgaa gaacaagcaa gaaactaaga ttgcaatcta gatattgcga 180
atataagatg aaagctttat tgatcaaggt gtggttctgt gacgcctttg tctggtcggt 240
gaacacaaac gaagtacgcg aaatttatga agtggcatct tgtatatattt gtccaaggct 300
tcatgcaccc attatgggtg cttcaaagcc cctactgcta catatacggg accaattact 360
agagtccagt aattggtgca ttggt 385

<210> 11043
<211> 400
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-029-Q1-E1-C10

<400> 11043

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ggtgacattt ggcgacggcg gcctctgaaa gcacaccgga ccagtgtgtg ccccaaacc 120
gcaagtggct aggttgggggt ctcaagtctt agatgttagg cttggctgcg aggtctgtgt 180
tattaggccc ggactatcag catcccttca tcaactggat angagtagcg atagatgttg 240
cctagacggt ggcttcagac ttactgttgt atttctttgt aaggactttt gtgaataatt 300
aataaaatgg ctgcatgcat cgtccaaatg cagaggccgg gggctcttct ccatttctaa 360
aaaaaaaaaa aaataaaaaa aaaaaaaaaa cggccgctct 400

<210> 11044
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-C3

<400> 11044

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ggccggccgt gctgctcgtc cccaagggca agacctacct gctcaagtcc atcaccctct 120
ctggccccgtg cagatccagc atcgtcttca aggtgaaggg cacgctcatc gtcctccga 180
gcatgtcggc gtggaccgac aacgatagga ggcgctggat ctctctccag cgcacaccg 240

gcctcacctg caatgggtggc ggcaccatca ccggcaacgg tgagatctgg tggaacaact 300
 cgtgcaagac caacaaggct ctgccgtgca atggggctcc cacggccctc acgtttcacc 360
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<210> 11045
 <211> 445
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-029-Q1-E1-C5
 <400> 11045

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 aagtgagtgt agtactttgt ttgaggagat agaagacaag gtggacaaat catgctgtct 180
 ccggcctgaa tatcttatcg catgttcgca caccaaataga ctcagcattt ttttatatat 240
 ttttcgcaat gaaccaaaga atcagcatca gttatggaga cacttctaga aaattataag 300
 cacgatgtta tagaaaccgg acgctctctc gcattggata gaggctaggc gagagtcaac 360
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 atatactttg tccccttcga agaaa 445

<210> 11046
 <211> 446
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-029-Q1-E1-C6
 <400> 11046

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 ctaaagcttg gtacaatact cttactcctg gttgtgtgcg tagtccccgg gatgtgattt 240
 attacttctc taaaaaatag tttcctgctc ataagaaaca agcttccttg catgaaatat 300
 ttaactttgt tcagactaaa gaagagagtc tcccacaagc ttgggggaag gctccgcagt 360

tacttaatgc tttgcctgat catcctctta ggaaaaatga aatacttgat accttctata 420
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<210> 11047
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-C7

<400> 11047

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cctacctgct caagtcctac accctctctg gcccgctgcag atccagcatc gtcttcaagg 180
tgaagggcac gctcatcgct cctccgagca tgctggcgctg gaccgacaac gataggaggc 240
gctggatctt cctccagcgc atcacggcc tcaccgtcaa tgggtggcggc accatcagcg 300
gcaacggtga gatctggtgg aacaactcgt gcaagaccaa caaggctctg ccgtgcaagg 360
gggctccac ggccctcagc tttcacctct gcaacaatct aaaggtggag aacctgaaac 420
ttgtaaacag ccaacaaatc c 441

<210> 11048
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-C9

<400> 11048

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ttctaattggg aatggaatct cataatactg aaagagaaga gctagcaatt cggaacgcaa 120
attgcgtttt aatacgtctc actattctaa ttttttagaa gaaatggcct ttattatttc 180
ttttttatgg ggttaataaa tattaatcaa atttaattta agaaatgaga gaattcagaa 240
tagctacgag aaagactagt ccaatccata atgatgtacc agaaaatata acatttttat 300
tatttgacca accatcagga gaagcaaata caaggggtac actaattacg aagactgagg 360
aagtcgcaat taatgcaaaa acagctaatt tggaaggcat aatcaaaatt ccaaaccctc 420

aaagctacca tc

432

<210> 11049
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-D12

<400> 11049

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accggcgata agctcacgcc tacccaaggc agaggctttt cacggatttc tttccggtat 180
gcatgcaagg cacatgatga tgattaccat caccagtata ctcatttcca acagcaagga 240
aatcactaat atgcattcat gcaaatgatc atatcacaat gacaataaca agttctcccg 300
atataaagtg gtgttataaa cgtttcaacc aacacatcaa aaatattatt ccgttgttca 360
gaatgcattc ctttaacggg gttgaaaagt gggggtgacc cccaatattt ccgaaagctt 420
ccttctcccc c 431

<210> 11050
<211> 404
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-029-Q1-E1-D2

<400> 11050

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tttgccgaaa caagcgggtga caaggaagag caagagaaat ctaagtaaata agcttggact 180
gaagcccttg tactcctttg tgccagcctt gttctgcatt ttccttgcat gagtatatgt 240
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tcatgtactt gctattctaa tttgtgtgat ggttgaggta ataaaagtct gccaaagcatt 360
gtgtcaaaaa aaaaaaaaaa aaataaaaaa aaaaaaagcg gccg 404

<210> 11051
 <211> 443
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-029-Q1-E1-D3

 <400> 11051

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 tatctctctg atcaagcaag aagagatcgg cagctccagc gacatgacga gccgtttccg 180
 ggtttttatg aacggaacta tttgggtct cgcggaagca aaactagcta gggtttatta 240
 gtgctgctct agttccgctt gctattcctt tcgcttgctt gtttgtttct ttaaggattt 300
 tattatcaac gttgtaaggc tggggatgtg cagctagctt cagattcaag cctgccgtct 360
 cgcctgcttg tacattggta aacagaaccg ctgggtctcca gtgaatgaat gattataagc 420
 agctactggg atgggtatttt ggg 443

<210> 11052
 <211> 182
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
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 <400> 11052

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 ttgattgtat ttgcagatta tgtgtgtaat ttactcaatg aganaaaata gcgtgctaca 180
 ac 182

<210> 11053
 <211> 423
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-029-Q1-E1-D8

 <400> 11053

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gtgccttact ttccccgagta agtcctcccc tcaactggcc cgtaacatat gaattcttac 180
atttcgatcg tttttctttt aacattccat gttttctgca gtgacacacg ttgcacgctc 240
atcctcctaa gccccaaata ttccatggcc acatatttcg acccggaccg tcagtcgaac 300
gtagactaca caaatgtcaa gaaggttctt gatgatgtcc tccccggcta cgccaaatct 360
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acg 423

<210> 11054
<211> 389
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-029-Q1-E1-E1
<400> 11054

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acgccccga cgacgagttc aggtcgcagt acctgcagga ctacatcgag gcgaccctcg 180
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aggagaggac gaggtaccag aggcactccg ccaagtgggt caccggcttc ctccgtggcg 360
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<210> 11055
<211> 397
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
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<400> 11055

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gcaaagaaaa ccaagtcaat tcattgcaaa acatgttggc tgcaccatcg tcgagttttc 120
cagtcaatgg ccattcttct aatggcagta ctgaaaaaac tgatatgaca tgcctctttg 180
gtcccaaaac aaaaactgaa agactcgagt atttaacccc agtgtcaaag cacagaagct 240
taccagctg tagcaatgat cggaccagtc agcacagctt ttctttctcg aaaggacatg 300
gtttagagag aaaganaatc aagccgctat ggacttcaac anaaccaact gcagctgatg 360
tcagtgacaa tttccngact aaaataattg cgagata 397

<210> 11056
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-E11

<400> 11056

gtccacgtta cacactatac tgagtcgtag taacctggaa acttgtccac ttccaaggctc 60
aggcccgtgg acttggagcc cgccatggtc gggtcctgca ctttcacgat cagcagcttc 120
tccaagctta aggcgacgct gcggagcttc gagtgcgcct actccaaacc cttcagcata 180
ggcgggatag catggttcct caagctctac cccaatgggt accagcgcga cgaggaacgc 240
gtgtccctgt cgctagtcg tgaacgttac aaccaaccgg caacgactgc ccagttcaac 300
tttgagtttg aggggatcgc caattatgag tctagtaaga taacacacat tttcaatcgt 360
ggcaactacg aagtcgaata taagctgccg ccgctcagca cttctgcaaa acatgaccct 420
ctcatcatcc aatgttgtc 439

<210> 11057
<211> 296
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-E2

<400> 11057

ttaaggacgt cgcgccttag caatcgctaa accaactccg aaaggttatt gaccgcgccg 60
gagcatgac aacctgacca cgaaggctctg tttcctgcag gcaaacgaag aatgagcaag 120
aaactaagat tgcaatctgg atattgcgaa tataagagga aagctttatt gatcaagggtg 180

gggttctgtg acgcctttgt ctggtcgttg aacacaaacg aagtacgcga agttgcagct 240
atggcgaact ttaatctaaa caaaacccaa agtctaaacg atgtcctaag ggttgt 296

<210> 11058
<211> 395
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-E3

<400> 11058

cgggctcgaca ctatgacaga aagtgactcg tcataatcgg gaagcatagg tcctattcat 60
catccagtag gtaaagtaca ccagatcgaa tttatgaact gtgactgcca tcacagtgtg 120
taagtatgac taagaggaaa tttcagtcag ttttctatc atcagactgc ccattaatac 180
ttacaaaaat tctcatgtga tagaatcaac aagtcaacat gtgcattttc aaataattag 240
ctcacccaaa acccaacaac ctatgttctc agccacccaa caagtgcac tcaacgttat 300
acactatagt ttacgtgaca gctcaagata catcaaccac tcatatagtc ctctaagact 360
gctaacaggc actacgttta catgatcatg acatt 395

<210> 11059
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-E5

<400> 11059

gggtcgactg ccaccaaagc gatatccatc atctcatcga aagacgggac acctttgcct 60
ttatcaagtg gtatcagatt tccaagttgc tcggtgagat tttacagttt ttcgtagttt 120
agatcgagtc tgttcttcat acctacagtc cacgaaaaag ccacaaaaaa aattaggggt 180
agttcatcat atccgagcca atctgagcct ttgcataatc tttttaggtt tttgctttgt 240
tgaatttgcg gttgcatcgt cgtgtctagt tgctggtctt agagtctagt cttttagagt 300
ttcgagttct ggtcataagt tgtcacgcca ccgccgcacc atcatcatcg cccctgccat 360
ctaccaccac cgcttatccg ccaccgcttc gaatccgtat ccatatacca ccaccgctgt 420
catataccac catcggtctg catct 445

<210> 11060
 <211> 388
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-E6

<400> 11060

ctcgcggggtc cacatgctgc gcaacacgcg gtcctgctac agaaagccgg ggcgtcccgg 60
 gtcttacggg gggcagcagc cgcagcaaca gctccattg aagcgaagat ctttgacagg 120
 atcgtccttc gcaacttgga gtcaccacaa gcagggcctt ccacatagaa gcaaaggatg 180
 atgagcaaac agcactccta cttttcactg gtggagaaga gcagctgacc tatttattcc 240
 cccatatcca tggcttcggc atgaaccaga cgacatgacg gctatcgtcg tcgaattttg 300
 gcatttcctc ctagagaact tggttggcat cttgttgctt ccgctgagtg tgccttgcca 360
 atttgtgtgg tagagcaagt taaggtaa 388

<210> 11061
 <211> 354
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-E8

<400> 11061

gcgggtcgac gttcacatga caacactatc gggttgacaa catacatctc atcaaaatat 60
 cgaacgaata ccaaattcac atgactactt atggcaagac ttctcccatg tcgacacctc 120
 agaggacagc gaagcatgcc cgctgttgc gtgatatgct tggaccgctt aaatcacatg 180
 aactcatggt aacataaaag atcatacttg tttgatccat tggttgcgca tatgctctct 240
 gattcagatt aactattggt ctcacgctg actttttggt gatgaggata atgctggctt 300
 ttgtgcgctc tataaagtct actaccctgc gtccaatgta ccatacaatt tttt 354

<210> 11062
 <211> 273
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-E9

<400> 11062

cggggtgcaca gcgttgatga accaccgtct cttatactac acagactoga tagactcgct 60
gacttttaaag cctgtgtaat gcgtggcaca cgccaatgtc gagtttaatt gtcgtagtct 120
ccggccgtga tgctcgatc gccaaagcaca cacactgccca ttgcatgaag tcgtccattg 180
cgtagactca tagtgcaaag ccgtgatatt gggctctggt gatggacgct aaaccgagta 240
cagtgtgtgt gtgtgtccct tgctgcattg gcg 273

<210> 11063

<211> 420

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-F1

<400> 11063

gggtcgaggc tatcaggga ctcagtttgg agaattgtcc tagaggtttt gttgtagcga 60
tggaagttca atctacatta ttgggaaaga ttcgtgaagc tcagaaggat gacaaggaaa 120
ttgcggagat aaaggagaag atgagtgaag gaaaagccaa aggttttctg gaggatgagc 180
acaacacctt gtggtttgag gaccgtgttt acgtgcccac taatgcggag atcaggaagt 240
tgatacttca ggaggctcac gactcgccat acttgataca cccagaaaac accaagatgt 300
atctgccaca gccctagaat attgtttgta aatagttgca tcttcatcca ggcacatat 360
ttaaatttct aaaacatgag ttgaggattg ttggaaaccc tcaaaaccct aaataaaaaga 420

<210> 11064

<211> 355

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-F3

<400> 11064

ggccaaacca gaaggctggc aagcaaaagc agtagcaaca atggagaggc gtagcggcgt 60
gagcgtgagc cttgttcttg gcctcctgct cgccaccacc gttgcttgcc atggtgagc 120
ggacatccca gcaactgagc ccgagtccta ccgtcccat aacgtctttg ggttcggtgg 180
tttctaccct ggcccgctcg tcaactgggt gtttcgggg ccaaacggcg tcacaccaca 240

ggtaggcttc ggcgggatgc cgggctctag ctcttcctt ggcactagt gctcgtccgg 300
cagcagtggc gtggtcggca ttcattggtgc tgccaatccc tgatcgtgtt gttgt 355

<210> 11065
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-F4

<400> 11065

gggtccacca gaagggcttt ccacgtgaag tcttgtctat ggcactgat gcaccgtct 60
gatttgttct atgtgcatca aggacaagta aactatctag tacaacatgc tttttcaagg 120
acaacaagta tactattgtc cttcgtaatt ggcgatacaa acttttttct ccatcttggc 180
cgttcgaggt caaaagattc catggagtgg ttaagccagc tcgctaggga catggaaatc 240
actagccaaa ctaccacggg actgccgtcc acgccgaaaa ctgtttgtct aattaaagca 300
gacagctgac tagttaacat ccttaatcgt ggctggtgtt ggatgcctta aacttaaagc 360
tggcaaggtc atggcgacg cggcctaatt agttgatcga gatctagaag taatcaaatg 420
cgcatgccga ac 432

<210> 11066
<211> 321
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-F5

<400> 11066

ggccgacatg actagtcgta aaccaaggc ggcacaaact tataggaaca tgcatacatg 60
accagcaac gaaccgtgtt gatcatgaac atatgaacgc aactcgtagg atgctgcaag 120
gacttaaagg aataacgact gtcatttccc tgaaaggaca catacattaa cgaagaagga 180
cacatgccgg gcagcctaag tggtccggat cagtagcaag ctaccatgga tcagtggaag 240
cactatgaca cattttccca tatgagacgc tattaagaat aaacaactac gttgtccgat 300
cccacacaca ccaatcattt c 321

<210> 11067

<211> 350
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-029-Q1-E1-F6

 <400> 11067

 tcgaccgaaa tagagcccac agagaggggta acgatagaga tgtacccacc agcagccaag 60
 tgcattgtctc cggaccagag tgtttcagca gagccatcag agctgtgggtg actcctccca 120
 acttcagggtt ggcgactgga gtcagcaagt tcaacgggtga gtctaagccc gatacttggc 180
 ttgaagacta ccgagtgggtt gttcagattg gcagcgggaa tgatgatgtg gccatgaagc 240
 atctgcctct tatgttggaa gggtcagcca gagcatgggt gaatcagttg acacccagca 300
 gcatttacac ttgggaggac ctctcccgag tgtttgtcag aacgttcgaa 350

<210> 11068
 <211> 428
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-029-Q1-E1-G10

 <400> 11068

 cacgggtcga cgtggcacgc gtatgatgat ccttgctact ggattggcaa tggtaaccgc 60
 cgttatgcat gtattcatca tgttctcgca ggccgagcgc tcaagctctg cgaaagcagc 120
 aagggaccga gtgaagaagg attgatagct cgtgtgaaat tcagtctata ggggaactgc 180
 caatttattg tgttcagaat atatgtagac acaggctcca tgggtcaaata ctagtatgtc 240
 cttgttgtcc tcggtgaagag cttcaggaat tttgtgtggc gagaactgtg agctttcttc 300
 cttctttctc tactttgtaa tgacttgtaa agatttgctt tgccatacca ggaatcgctg 360
 ctcgaattta tcgaagcttt tttttatcta aaaaaaana aaaaaaaaaa aaaaaaagcg 420
 gccgctct 428

<210> 11069
 <211> 370
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-029-Q1-E1-G5

<400> 11069

ctcgcggggtc gacgctatcc tctatagtgt gtcgtcataa gaaatacagg atccgtcaaa 60
aacgtctgggt gacgccaata caggctcaga gcatgaacct cgactagctc atcgtagtga 120
agaacaacag ggccatgcca tgtgcggaaa gcctactgca ttccttccat gtaataaata 180
gcactggcat ggctgatttt ttaaacgagg gcgctgattt atacagtttt ttcttcttat 240
gctgcaacaa caacatcagt gtctatcaga tgagagcatg ccatgtacag cggggtagat 300
gttctcactg gatttctacg tcggcacgac gacatcacga attgcaacag cctgcctgtc 360
gtcatcatgc 370

<210> 11070

<211> 267

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-G8

<400> 11070

gggtcgagac caccgccatc gccaaagatcg cgctgtttga cgccgagttt atcacaggga 60
gggtgaaggt gattctctcg ggtggaggct gcggggagtc cgtgatgtat gtcacccagt 120
cgtccttcag ctccagggct tgggtggttac ggaacaatga cgccacatgt ccgtcagagc 180
ccatgctgag gacgatgaga tcaaacttgg cgcagtcctg gctctccgag actcctatag 240
tgcggatctt ggacagctgc ctgatga 267

<210> 11071

<211> 364

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-G9

<400> 11071

gggtcgacgt taaccactca cccagccat cgaagtacct cacaagttat gtctctcctt 60
tctctgacac aggatgattg atcttctat gtcattacgt cagcttagta catccgtatc 120
gccctccatc attcatgcat gcctcctgat tcagtctttc acagacttgt gcacagacag 180
gcagttatcc ccacacgac tgatattgca ggctgtcgct ccggttgctc atcaagccta 240

tcacaccatt tgttggcagc agtgctagta ccactccctc catgagtcaa tctctgtacc 300
tctccgattc ttactcatct cgtacacata cgcattggatg ccgatcgatc tcgcgtaata 360
catg 364

<210> 11072
<211> 435
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-029-Q1-E1-H1
<400> 11072

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tcgatcggcc tattttgttc atttcctaata atcaagtaac taataactct ettggttcatt 120
taattttctt tgccctcgtag cgtttggaga cggttcgtag atacaaaggt cggatgaattc 180
aaaaaagagc tagaattcaa aagggcaaag gctaagaatg gtgaggatat tcagccagcg 240
gggaccaatc tatgtgcata ctatgtctgt gagatgatcc ggagatacac ctctgagcgg 300
gttccgagtg ataccaatgc tcagaggaat aacctccgga tgatgcttag tccagaagct 360
cgcttccgac cacttcaaga ggaactanct ggatggttca agagggaagt cctccatcct 420
aaaggagaac accat 435

<210> 11073
<211> 432
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-029-Q1-E1-H10
<400> 11073

gtcgacgccg atcacgatgt tgggtcggca ttagccgacg tcgatgcggg aactacttct 60
atatatagtt gagtaaaagt agttttatta attaaatcaa ctatctagtt caactactaa 120
gcacttacta taaataaata agtagtactt actaaagaca aactacgtcg atatatagta 180
gaataagtta ggttattaaa ttaactagct agatcaacta tagatgaact acttcttatt 240
tttttccttt ttctaaatac tttgaacaaa aaaatcatta aaattctatg aacaaaatta 300

attactacac atctagtcta aaaaaaaatc taatctagca acaaaaatct atgaactaca 360
 tatctaaatt actacacatc taatcgaaca aaagaaatct aattaatcta acagaagaat 420
 ctaacataat at 432

<210> 11074
 <211> 79
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-H2

<400> 11074

gggtcgacgc tgatccatag atggagtcgt ctaaatcgat tgatctccat ctggaccgat 60
 ccatcacgtg tgatacctc 79

<210> 11075
 <211> 359
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-H3

<400> 11075

gggtcgacat aaccgataga ctaacctctg acgtgccttg cctacatgac catgcaagat 60
 gtcaacgccc ttcctacttt taaccacat ggtggggcca taaccacag ttccacatga 120
 tcgaaacctg actctccaat acacctgtt gtggaagtta ttcctcgcg c ttggcttcat 180
 atttaattca gggccacctt tctagtgtc tattctggta tcagacgcaa tacttactct 240
 cgctgtctctg aaaccctttc tcactctggt tcagacttcg agcagctatc tatccacttg 300
 gcacctccta ttgtaccttc atatcttact cttgatgtat tcgatatggt caactcgag 359

<210> 11076
 <211> 377
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-H4

<400> 11076

cacatgtcaa gcaggcaaca aatgacatta atgcacctgc aaggatgagg gtggctgcaa 60

acgagaaggc ggaggtgag aacattgtcc agatcaagcg tgccgagggg gaagcagagg 120
ccaagtacct gtctggcctg ggtatcgccc gccagcgcca ggccattgtg gatggcctga 180
gggacatcgt cctgggcttc tcagtcaatg tgcctggcac cactgcaaag gacgtgatgg 240
acatgggtgct gattcaccag tactttgaca ctatgaaaga ggttggcgcg tcctccaagt 300
cctcgggcggg gttcatcccc catggccctg acgcggtgcg ccgacatccc cacgcagatc 360
ccccaacggg cttcttc 377

<210> 11077
<211> 307
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-029-Q1-E1-H6

<400> 11077
gggtccacaa ctttcaccgg taatctgtat gcaacgtcat aggaagaaaa actatcaaat 60
atgtgaagga gcagtaaaca aaaggatctt aagctacatc tacatatatt acataaggat 120
cttcaattat gggaaacaaa aagatatgca aaaacacaca tcaatgtaat cactggtttc 180
aaccacaata acatatccat aaactttccc cccaaaaaaa aaaaaaaaaa aaggaaaaaa 240
aaaaccggcc ctccaaaaga ttcaaaccta acttccccctt caatgcaact taaaaccctt 300
ccaaaat 307

<210> 11078
<211> 414
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-029-Q1-E1-H9

<400> 11078
cgcttgcccc tacgggtcct agattcacgg gtccactcgt gatagctcca gatctcatcg 60
tccttggtag atctcgcagc cgaagcttgc ggtctctgtc ggctatgaaa tgcaggaggg 120
aacaaggaga acgtgtctgg actccaggct tgatgttcta aagaggaaac cttgttttag 180
tgttgggtgg atgataatga tgggtgggat ccgactggat gcgacggtgg aaccgaactg 240
aactgaggtt ggggtgttgg gcaagctcgc ccacctggcg ccgaaatgaa acgcggtcgc 300

tctcatctcc atcagatcga ccagaatacc atctcatcaa tcagtaagga aaattatcgg 360
ccggaagata ctacacactc tgaatctgaa tagagaaaat tcaactttcg ctta 414

<210> 11079
<211> 445
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-030-Q1-E1-A12

<400> 11079

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ccgaagcccc ctatccttga gcttgacaag ctcatgtggc atcctggacg acgtcctcgc 120
catggcgccc aagcctcgca accacatcgc cagctgccgc caaagctgat catgtttggca 180
gaccaggatg aggacaaccc ataccgcacc caaggtagta atttcagtca tgcttaccaa 240
caagtttttt tctacgaaaa caaaactttt gtttctgggc agcatgttcc tcccgggcat 300
caacactgtg caactttgaa tcaaaggtg aggtanctag ctcccttatt gttgttttat 360
ttgattttcc taaggcatta catacataat tgtaacccgg cctaagcttc ctagaaatac 420
ataagtctca ctaggaagtt tggat 445

<210> 11080
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-030-Q1-E1-B11

<400> 11080

ggtcgacgcc aaagacgatc tcaagacatg caagcgcgag atgtcagtcg ccacaagagg 60
agttgagcga gagattggct ccctgcaaat ggaggagaag aagctgggtg ctgagatcaa 120
gaacactgcc aagactggaa atgaggctgc aacaaaaatt ctagcccggc aactagtcag 180
gcttaggcaa caaatcgtca atttacaagg tacacgggcg cagatacgtg gagtagctac 240
tcacacacag gcaatgtatg ctggaacttc aatatctgct ggaatgaaag gcgcaagcaa 300
agcgatggca gcaatgaata agcaattgga accaacgaag cagatgaagc agatgagaga 360
attccagaag caatcatctc aattggacat gacgcttgag atgatgtctg atgccattga 420

tgaaacacta gat

433

<210> 11081

<211> 451

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-030-Q1-E1-B9

<400> 11081

gtccaggggt cgcagagact tgcagaacac gcaagctttc tcatggagct cgtgtccaat 60
gatactgaaa ggaaaaatgg agtgaaagtg ctactgctcc agttttgaac ttcttattca 120
gtcatgctat tactgagtga aaaatggagt caaagtgtat tgcaattgat ctctcttaga 180
ccctggcaat cctctatttt tatcctttgt ttgcttgtct tttgggtctgt aattcaagaa 240
ctttgacctt cgtaattcgg tttttgggta atttattatg cccgggtacaa acctttaaat 300
ctgaagaggc ttctaatagc aaaaaaatgt gcagccgggtg tgggtctatat gtcaattcat 360
gtatgaaaat gtgcattcgg tgtgggtgtat atgttattcg tgtacatgta ttatatgtgt 420
gaaaaaat tctgtatatga tgagatgatt g 451

<210> 11082

<211> 447

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-030-Q1-E1-C10

<400> 11082

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catagagtan ggtgtgcatg tgtacattca tagagggtgag tgtaatcgcg tatgtatgag 120
cggttgcatc tgtactgtgt taaaaaaact cctactatta tacatgcacg tagccaattc 180
atcctcggag accatgccca actcaggaca tgcaccatcc atcaacaaaa tcggagaagc 240
agtgcagccc gccataaccc cccaattatc caacatgggt acacacatta tttgatttta 300
gcctgcaaaa aaaaatgcag gagtcccgat agcatggaag catcgatttt tttcactgaa 360
gacaccaagt gaatacacca aaaaataggt caaatgtgaa agggaaaata acagggtaaa 420

taaacttttg aaaagaccct ataggag

447

<210> 11083

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-030-Q1-E1-C12

<400> 11083

tcacgggtcg acggacctcc cgaggatgtg tctgttaga cagtgagcct agtgagtgag 60
cacaaacatg tctgcctctg tcatggcgtc tttggttctg ctgaaaccat ctccctctcc 120
actgttagga cgagcgaagc tccggggtgt gcgaccatcg gcgaggccat cgctgctcat 180
agtagccagc aagaaggcga agaagggtcca gactgcccaa ccctacgggc ctggtggtgg 240
agtgggtgttc aaggaaggcg tcgatgcgtc cggaagggcg gccaaagggga acggtgttta 300
ccagtttgcc gacaagtatg gagcaaactg tgatgggtac agcccgatat atacaccaga 360
agaatggtct ccaagtgggtg acgtttatgt tggaggaaag acagggctgt ttctctgggc 420
agtcactctt tctggaattc tgttgggt 448

<210> 11084

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-030-Q1-E1-D10

<400> 11084

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gtaccgccac tgcgacggga agctcgtgct caaggtcacc gacgaccgag agtgcttgaa 120
gtttaagacg gatcaagctc aggacgcaa gaagatggag aagctcaaca acatcttttt 180
cgctctcatg actcgtgggc ctgatgctga tataagcgag gtttcaggga aggaacaggc 240
ggagcagcag caatcgaaga agggacgggg caggaggcag tagtatcatg ttctggattt 300
ctttcagaaa gatcacaact gggagtgggt ggtggatatt ttgatggact cctgttagtc 360
atgttacaac tgtgagtggg ggggtgtcta agagtggcaa atagttttca gacaatgtgc 420
gccatcttcg gatccttttc ct 442

<210> 11085
 <211> 375
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-030-Q1-E1-E10

<400> 11085

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 ttctccagtg ggtacacgaa atgcgatgat tttgtccggg cagccataca ggctgggagg 180
 aggagctgat cagccacaac tcctctccac tggtttgtgtt gatataaggc acgacccttt 240
 ttgttttgta tgatgagata tgcagcttat gtgtgtaaac agtctagcac ttggacatca 300
 gctggttgaa cttgtataat attatgtcgt ggaattgccg gccttcattc tcaacatgct 360
 ttgctcctgc tgcca 375

<210> 11086
 <211> 386
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-030-Q1-E1-E12

<400> 11086

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 atagcatgca gacccaagtc cgtttcaaag gagctgtgag ttggggttgc tacggatatg 120
 tgccatcaca tcagagtcca gtaacactaa ttcagacagt ggcagttata ctgcagtgca 180
 gagcttccac caacatgttg ttgcagcagc atagcagagt atgcatgctg tgttgctggc 240
 tgttccgcga tacacatctc cagtttagcag cactgaccca gcaccaatcc gatcatgccg 300
 ggttcctctc aaaccagggg cagtgcagca ggaaggcc cgacaaatgt gtgttgggac 360
 aaggccatgt gatgcgtgcc gctatc 386

<210> 11087
 <211> 448
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-030-Q1-E1-F10

<400> 11087

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atactogagt tggctcgtgcg gcttcaccac cttgttagcc agagcaaccg gccggcaaat 120
gttaaaaaag cccagtccat gtaaccatca tcaggatcatg gggatgatgac aagcgcatta 180
cacacaagtc atggcctgac aagagcagac agaaagccat tacgatctgt ttcgttttca 240
ttgttgctag gttgtataga agggggaact gtgtctgttc ttaccaggaa ggacttgaaa 300
cctgatatta ggtagggaaa taacaagagc ttctcctttc atcttttggg ttctttgaga 360
ggctgggttc taattccatc tcatgtatgt ggtgttgaca ttgtttaaca cctcaaaaaca 420
tcgtggctaa ataacaaact taatacta 448

<210> 11088

<211> 456

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-030-Q1-E1-F12

<400> 11088

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ttcaatttca cagctacgaa tgaaaaacga acacggagac cccttgagc cgtaagaaca 120
tgcactacca aaagaccttg catcactatg atcataatth tatgagattt ttcaagtcca 180
cacataaaac atagcattta taaagtagat gatcggtatc acttaaattt ctagaattgt 240
tgctgggtgc cggttgaaaa tttggtgtat gggagggaaa aaagcaacc attgatgagt 300
gggtcccacg tgacaagaaa gattctatag gttgctatta caaaaaatca tttcaagatt 360
tttgtattta catatactga cactagtaga aaacgggggt tacgttcggg ccagataagc 420
ccattagtct tggttccgtc acgaaccggg acccat 456

<210> 11089

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-030-Q1-E1-F9

<400> 11089

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tgaatggcta gacgccatc tcggacaaga aaagccagag ccaatggat cccttacggc 120
actcatgacc cgcttttgcg caggcgagga cagctagccg gctcgtagca aaaacacagc 180
cagtgaggca ggccttacag aggccaggaa cagcactggc aagctccggc gcaatagaca 240
caaacgcaga agcaatggcg acaacatcaa agacaccaca gtcaacgccg gattcagtgg 300
ctccaagtcc ggccaacgaa agaaacccta caaaagaaat aacaaaggac cttccagcct 360
ggaccgcata ctgaccgcc cgtgcgaaat tcatggcacc ccggataaac aagacaatca 420
taccaacagg gattgttggg tcttcaag 448

<210> 11090

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-030-Q1-E1-G10

<400> 11090

tccctaaact gaatcgta aatcaggaaa agtgggtcac tttcttatcc tttggtaaaa 60
cgataagctt gaatacaggc atcataatcg aaaaacagat gaccaaaaaa gagatgttaa 120
ctattcatga taacaaccat catggcaaca aacacattac accactgatc agctagtaga 180
tctcacaagg tcagcactga gcaagtcttc attatcttta acatagctct tgaaatctct 240
cgctacactc ttcacattaa gtcattatt ttcagcaccg tatgacgtac aatcaagcac 300
aagctgcaaa taagccaaac cataaatata caggggaaaa ggataaacia agcaatgtat 360
tatcataact cgtaaaccia aatatgcgtt cctgtctaag agaaacacia gatctggctg 420
gttaccg 427

<210> 11091

<211> 428

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-030-Q1-E1-G11

<400> 11091

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cagtctgcac atctgcgtga cgcttcaaca cacggctatc tatgaggaat tcctcaagga 120
cctcgaggat tccgtggaca cagtgaagc gaatccaggg cctatcagtg gggggatggc 180
tcccatctat ggcgcggctg ggaagatgcc ggacagaggg acggtcaagg agttgcttgt 240
ggagttcatg gacagctctt gctaaccatt gactataccc cattggttat ctctctgtaa 300
catgtatgac tgttgtgtga tcttctatat ttggtttggc tgcaaacag aaggcacaca 360
atgcctccaa tacagacatg tatctatgta tcagttacat tggttgcaat gaagttacat 420
tttcagcc 428

<210> 11092

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-030-Q1-E1-G12

<400> 11092

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ccccgttggc ggggccaaagg cgggcgattc cgacagtcac cgggttagtg gacttggttc 120
ttttttaatt gcctgctact tctctacact tttcccatgt tcatgtcaca ccatgcagat 180
ccgcccttga cctgatgttg acggcgacgg tggaccagac catagagtgg gagccggacc 240
ggaccacaga ggacctcgtg acctggcaga ctggttgcaa acctgacgtc acggagcgtg 300
ccgtgtggcg agaccgggag ctggcaatga aagaggcggc ggagcatgca acgagagacg 360
aagaggcttt agcttacgcg cgtgatagag ccgccc 396

<210> 11093

<211> 435

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-030-Q1-E1-H10

<400> 11093

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tcgtcgccag cagccacgat ccgccatagc cggccaaccc cgctgcatca aactcctttg 120
 tggagagatc ctccttgccct ttgcaggagc cacatgggtct tggcctggcg gcgacgagag 180
 ggctggaaaa gttggcggcg agggatangt ctgacctgtc gtgtgtggct atgcgtgcaa 240
 attcaaagaa atcccgagtg ggactactaa ttgactagaa tagagttttc tccctttttt 300
 tatcatgtat aagggtgcact ggaccaaagt cgcaactcag tagaaaaatg ccgattcgat 360
 tgaattgtta tcaagacaag gcaatattac tattttcagt agtaagaata attccaggca 420
 gtagtgtcat caaga 435

<210> 11094
 <211> 372
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-030-Q1-E1-H11
 <400> 11094

ttagacataa ttattttattt atattggtgt taaacctact gcattcaaac ttctctatgg 60
 tttataaact cttttactag ccatagattc atcaaaataa gcatacaaca cacgaaaaac 120
 agaatctgtc aaaaacagaa cagtctgtag taatctgcaa ctaacgcaaa cttctggaac 180
 tccaaaaaaa tcagccaaaa tacgacgacc tagccaattt gtttattgat cagcagcaat 240
 tggaatcaat attttatcac gttctggtgt tttttaacaa ttattttcat gaacagaaag 300
 tttctgggaa ttacagcaag atcaataac tatcatocaa gaagatccta taagtttaac 360
 ttgggaaaaa ca 372

<210> 11095
 <211> 419
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-030-Q1-E1-H9
 <400> 11095

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 tctcgctccc tagtcatcga aacatcaata ccaacccaac tagacgtagg ccttaccttc 120

accataaggg gccgaactag tataaacct ctcgtgtcct ttgtcccatt taacccttc 180
aagcttecta gttgcgatgg ctccacaact aagtcctttc acgaggacat ttgacgtgac 240
aattccacga cacatatcat caatatcaat caagcaggag tagggtttta cctccatcga 300
gagggcccgga acctgggtaa aaacatcgtg tcccttgtct cctgttacca tccacctaga 360
cgcacagttc gggacccct acccgagatc cgccggtttt gacaccaaca ctttgttat 419

<210> 11096
<211> 363
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-031-Q1-E1-A1

<400> 11096

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atggcctggc gccggaaatc ccagaggatc tgtacttttt gattaagaag gctgtggcca 120
ttangaagca tcttgagagg aacaggaagg acaaggactc caaattcagg ctcatcttg 180
ttgagagcaa gatccaccgt cttgcccgtt actacaagcg caccaagaag ctcccgccca 240
cctggaagta cgagtctacc actgccagca ctctggtggc ttaagagggc tcttcatctg 300
gtgtgctctt actggcttca ggatggtctt gttctacata ttatcaattt catgtaacgc 360
ttt 363

<210> 11097
<211> 383
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-031-Q1-E1-A12

<400> 11097

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gatgaacaac aggatgacta gagatgctct cgggatcaag gggggaacag ttggcgagtg 120
ggtgagatgc aaaaaagaac tcccctacac acaggacatg ccaagcagca taccgtacca 180
tcttaatctc accacgagag gttaccgtgc actcgtatac agcggagacc atgatctcca 240

ggtgcctcag ctcagcacgc ancggtggat aagatctttg aactttctcca tcggcgatga 300
 ccggagggca tggcatctcg attgccaagc tgcaaggatt taccaccaca tatgcaaata 360
 acttaacctt tgcaccatta aag 383

<210> 11098
 <211> 453
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-031-Q1-E1-A2
 <400> 11098

ctgcagtacg gtcgaaaatt cacgggtcga caagtatgac attggagcgg gctttggaca 60
 ttttggcaac ccacaataag gatttttcaa actgggttga aacatttaaa caatcctcaa 120
 gttggtagaa tactccgtga acctggtcct gtcaaaggag ggtccactgt gattgctttt 180
 gcaccagacc cagatggtta catgttcgag cttatccaga ggggtccgac gcctgagcct 240
 ctctgtcaag ttatgcttcg tgttggtgac cttgatcggc ctatcatggt ctacgagaag 300
 gcccttggga tgaagcttct gaggaagaag gatgtgcctc agtacaagta cactattgcc 360
 atgatgggct atgctgagga ggataagaac actgttctgg agttgacata caactatggt 420
 gtcacagaat ataacaaggg caatgcatat gct 453

<210> 11099
 <211> 433
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-031-Q1-E1-A4
 <400> 11099

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 aatcggtcag ttgaatagtc gggagcagta atttaatcgt tcaaattttt ttcttgtgtt 120
 agtatttttt tagtagtctt atagtagtct tagatttttc attttgatga gcctcgcttt 180
 gaggaattca tggaataatc cattttcatg gaataatgaa ttaaggaaga aaggatatga 240
 gtctaccgct tacaagaaaa gatctcatga tagtcaatat ggggcgtcaa caccatcaa 300
 tgcatgggtg tcttcgactg atcgttactc tcgatgggtg ggatgttatt gattgtgaac 360

ccatattagg ctatttacac agaggaatgg aaaaaatcgc ggaaaaccga actattatac 420
aataacttacc tta 433

<210> 11100
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-A5

<400> 11100

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tcgatcgatc gcttgggttt agtaacgcgt agcctgcagt gtaatcgctc gggttcagtt 120
agagcctgac gcctcgctcg gggttcagta gagccaacgc ctgcgcacaca cgcggtacg 180
tgtacgagag aagcgcgcat cgctcagccc caacctccca ccgtaaccgg gaactccccg 240
aaattttcct cccctcgcgt tctacatgg ttttttccat catggacggc ccaaagaatg 300
tcatgcagct gcgctctccg cccgccagg acgaaaagcc cattttctgt catgattttt 360
tgtcatagaa gtaggagccc accacatcaa tgatgatact gggttttgtc acaattatcg 420
tca 423

<210> 11101
<211> 236
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-B1

<400> 11101

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ctcagtggtg gcctggaaga caacaaaaca agacaagagt caatcaaccg atttgcagtg 120
aaatagaatg aatgaaacag gatcacaacc gaggataggt gttcataccg tgtctggatc 180
gaaagactgg tcgagcggcg ggatcctcct agccccacga aggttgctct tgttcc 236

<210> 11102
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-B10

<400> 11102

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gaagattctc aaaaaactaa ttatcccctt gtacgattcc attgtattat aaaaataatg 120
tgccaagatt ttccttttagg atgttttagat cgcttggttg tttgtgcggt gcaaaacaga 180
aactttggct gtagtgctcg attttaaatt ttctactcga atgtcaaagtg gttttgaaat 240
tttttgcact gtatttatat acaaaatttt tatttttctt aattttttca gaattgttgg 300
agtaccatag gtatggtgaa tggtcagatt actacagact atcctgttta agacagattc 360
tgtttttgat gcattgtttt gctcgttttg atgaaactgt caatttttat caatagtata 420
agctat 426

<210> 11103

<211> 222

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-B11

<400> 11103

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atcctcataa tcgcccgcag actcattaac ctcttggtga ccagcagcag cagtagcatg 120
agccaaagaa gcatcaacaa cagggatagc agcaccagaa gtttggtccac cctcaagagg 180
aacacgcttc gctcgtccat actgagtcga aaggggcgtt gt 222

<210> 11104

<211> 199

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-B2

<400> 11104

gtgcgcacgg acgcatcagt ccgtacatgt cgaacccctg ccacattgag ctgatcgtgt 60
cagagaaaga aaagcctgtg aacaaggaag ctgaaagcgt cgtcgcacca aggaaagcca 120
cccaaactac cggaatggat gcgatcatcc aacagtccga gttgtagttc ttcacaagta 180

cctttgttgg aagtgtttg

199

<210> 11105

<211> 412

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-B3

<400> 11105

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actgaagcta cagcaactgc tgcttcccaa gattaatctg ccggcgcaac ttgccctaac 120

acagcaactg ccgctcctgc tctgccaac agtgggtgcc ccaaacttct ccgagttgag 180

ctgcctgctc ctgcctcagc tgcactgca atctggtttc gttggctctg ctgcttgaag 240

tataatcctc actctatcca tggtatctta ctttttattg cttgcttgtg aactttatat 300

attgctatat tatatcctgg ttttgctgct tgcgtatggc atgtactgct gtgcttgtga 360

tcgctgggtgc ataatgtgac ctatactttg gatactgaaa tgcaactgtt ca 412

<210> 11106

<211> 294

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-B4

<400> 11106

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aattgttcaa gactgtgaac cgggagggtc ctggtatata tacgttcatt gtacttagtt 120

aagttgatgt tactgttggt ttttctcgct gccgccatgc catgagcaag cgaggcaggc 180

agcttctcaa acttgtgttg ttgtaacttg tatgatggga gcttaagtac attactttgt 240

ttcaaaatac accatgttat ctcttttgtt tcttaattaa tgttggacac tggc 294

<210> 11107

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-B5

<400> 11107

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gatatttgcg gaagtaccta atgttactag ttttagaggg gtggtagtat atgttcatgg 120
attttaccct catgcggggg gagcagttgt ccgacctggg agatttcctg gccacattaa 180
tggtgtttac caactgggtg attttacata ccttgacgga gacttcacat ctgagtctgg 240
aacgtctggg ggaccagtta ccatgggaga tagagttatt ggagtaaagtg tgcaaagtgt 300
gggaggatcg agatgcgcgg tttccctct gacactatac atgacattta tgaattgggtg 360
tggttttaat ggcggagacc atacaattgc tgcgatgata caacgccttg ctgcctaatac 420
agttttgcaa tgtcaagcat ca 442

<210> 11108

<211> 378

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-B9

<400> 11108

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gctgcaagga tgagggtggc tgcaaagcag aaggcggagg ctgagaagat tgtccagatc 120
aagcgtgccg aggggtgaagc agaggccaag tacctgtctg gcctcggtat cgcgcgccag 180
cgccaggcca ttgtggatgg cctgaggggac agcgtcctgg gcttctcagt caatgtgcct 240
ggcaccactg caaaggatgt gatggacatg gtgctgatca cccagtactt cgatactatg 300
aaagagattg gcgcgtctc caagtcctcg gcggtgttca tccccatgg ccctgggtgcg 360
gtgcgcgaca tcgccacg 378

<210> 11109

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-C10

<400> 11109

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cacgtgtgat ctggttttct gcaaaatgct agttacagtt gcttggtccc ttgtttcttg 120
ctatcggggt taaaatccaa gcttatctgt ttggccatcc ttacctgtgg ttgcccagc 180
taagccggtt gaactattta tgtatctata ttgtcatgcc ttgggtacctc cctacctgtt 240
gtacttgatt cattcatcgc gtttgctccg atgtgggtatt acttaggctg ctcaagtaat 300
gagcatatta gttgttgcta ctaaactttc tcaactccgct gtaatgttat atattgtctc 360
tggaagttaa agcttattgg taatgttgct gctacattgt tatgtagcat cctcc 415

<210> 11110
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-C2

<400> 11110

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ttagatcgag tctgtttctt atacctacag tccacgaaaa agccacaaaa aaaaattagg 180
gtagttcat catatccgaa ccaatctgag cctttgcata atcttttttag ggtttttgct 240
ttgttgaatt tgccggttgca tcgtcgtgtc aagttgctgg tcttagagtc tagtctttta 300
gagtttcgag ttctgggtcat aagttgtcac gccgccgccg caccatcatc atcgccttgc 360
catctaccac cattgcttat ccgccaccgc tttgaatccg tatccatata ccagcaccgc 420
tgccatatac taccgccata tatccac 447

<210> 11111
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-C9

<400> 11111

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tgaggaaatg gtgatagctg acatgcaa at taggcctgga gaagcctggg aatactgtcc 120
tagatatgcc ttaagaaaag tcacaaaagt tctgctggat gaattcaatg tgacaatgaa 180

ggcagggtttt gagaatgaat tttatctccg cagaaaatta gtaagtgagg gacatgagcg 240
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 tatactacaa gaagtgtatt cttctcttaa agtggcaaat attgtggttg agcagctgca 360
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 tgctgacaat ttgatatat 439

<210> 11112
 <211> 215
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-D10

<400> 11112

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 aactcgtgta gttgtttag cccaccagca tcagcagcgt gagcgagagc aagagcagag 120
 cagcagcacg agcgacgggg agagcacagc agcagcgcaa gtgagagcgg gagcggcagc 180
 agatctgggt ggtgtggatg tcgccgccgc cgaag 215

<210> 11113
 <211> 356
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-D11

<400> 11113

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 cgcatatcgt tggcacaac aagttgcagc ctggggatca atggcactgt tacaactgaa 120
 acattttcga catttatata ctttcagtgc atcaaacgga aaatcgacga caacctgaca 180
 tgcaagtcta tgcatgagga cagtatgtgt gtaccatcac tgtccttatg gtttgctgct 240
 caaagttaga gtttcgttaa cttgacggtc taagcagcat gtcataattag ctctcaaagt 300
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<210> 11114
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<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-D2

<400> 11114

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cgtgagaggg gtatcaccat cgatattgcc ctctggaagt tcgggaccac caagtactac 180

tgcaccgtca ttgatgcccc tggtcaccgt gacttcatca agaacatgat caccggtacc 240

tcccaggctg actgtgctgt tctcatcatc gactccacca ctggtgggtt tgaagctggt 300

atctccaagg atggccagac acgtgagcac gctctccttg ctttcactct tggagtgaag 360

cagatgatct gctgctgcaa caagatggac gccaccac 398

<210> 11115

<211> 399

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-D4

<400> 11115

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agagtgttgg atgggtgatg gagttgcttc tcgaagatgg tgggagaggc ctactagaaa 120

aactgagggg agaactacaa tattatcaat aagagtgggg atgtgtttct gtgtgtgcct 180

gtgcgtgata gatctgtcgg gacgcatgca tggatgatga aggggaacca tgtgtttgct 240

aagcaaact aactatatcg gtagatcaat tggtgtttgt cggaggaagg gagagacata 300

actaatgagg tagatcgatc gacgctggg gaaaaacgag ttataattaa ggacctagct 360

agctatatgt atagcgggag atctgtcagt gtacatcca 399

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<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-D7

<400> 11116

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 cagctgctcg agcccgtagc gaaaaacgcc aggetgaagc tgctcaacga gctgcagagc 180
 tgcgtgcaca ggaagtcacg aaggagctgg agaacaccgc aagagttttc cagctgcaca 240
 tggaagagct gcgggcaaaa caagaggaga tcgccaagag agatagtgat atcaagggtg 300
 tggaagcaat aatacgaacc ctgagtagca aagatgatag cggatccagc gagtaataac 360
 catacactgg gagcatttgg gcattctcat tgatgctttc gtgttcaagc atcccggcac 420
 atatttatcg actccatgta agcacttcaa tact 454

<210> 11117
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 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-031-Q1-E1-D8

 <400> 11117

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 cgccgcccgt cgaacaccct cgtgagtctg cacactacaa acaagcacgg acaaatttgc 180
 caaacatcta caggaagaac ccaagctaaa aaaaaactaa tgttctcttt gctttttctt 240
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 tatatcaggg gttcggagag ctccatctcg ttggagggtc cctctgcctc ggcaggcggc 360
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 cggctgctcg ggtccgcctt attgtccgac tcctccgct g 461

<210> 11118
 <211> 393
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-031-Q1-E1-D9

 <400> 11118

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gatcgaggtc atcttcaacc tccgcaccgc cgctcaccgt ctctgattcg gcctcaccgg 120
 agcctcctcg agcccgcttt gtcacctac aggatcgata cccaagact gccggcgacc 180
 cccagttcga ctactgtgtt gacgaccctt gtcttttgcc agagcaacca gacgatggag 240
 tccaggatcc aaacgccacc atcgacgatg actcctacta cgccggagggt gcctactact 300
 atgtgtagcc cgctgacgat gaccaggagt agttaggagg atcccaggca ggaggcctgc 360
 gcctctttcg atctgtagcc taatttgtgc tag 393

<210> 11119
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-E11

<400> 11119
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 aatcctggtc attgctcagc agaggcccat catctccact cgggaaaagg tcttctccta 180
 gatccatctt ctctccagc gtggcaatat atttcttccg gtctctgagt ctttccataa 240
 aatccttgac ttcacctga tgctcatagt gggcttcacg tgttgcatcc tctagctcaa 300
 tttcacgaag atgcaacttt tggaccgtct tcaagctctt gcgcatctga atctctagag 360
 cctgatgtg agcctccaag tcttgacat atgagcgaac ggagtcgtca tctatggtgc 420
 ggataatctc tccatct 437

<210> 11120
 <211> 404
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-E12

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 agtattattc atactccaaa agatataagt gaagttcatg gagcattcta caattaatat 180

agactaacca atatcccagc tcaaaatata taaatgaagc acacgaagca ttctgtaaaa 240
ccatactcaa aagattaaag tgaagcacia agagcaattc tataagatca tacttaaaag 300
atataagtga agcacatgaa gtattctaca aatcaatgaa gggctatctc atactatcat 360
gggtccaaaaa aaaaaaaaaa aaaaaaaaaa aaagcggccg ctct 404

<210> 11121
<211> 376
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-031-Q1-E1-E2
<400> 11121

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tgtgttgact tcaatcgtgg ccttaacaag atagggtctcc ctaaatcgcg gtatgagggg 180
agactgactg gaaaacgcac gctaggatcg gactcaatat tattcacgga tcggcactct 240
tggtctcaag cacactacac agttctacgg aactctacct tggtgatccc gtatgtcgat 300
gaccacaaga acagtctgcg ctccatacac ccagactagt gcgatgactg gattacatgt 360
gaacacatca ggactt 376

<210> 11122
<211> 384
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-031-Q1-E1-E4
<400> 11122

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cctacctcgt cgccgagagg gttgtcgtca ccaccaagca caacgacgac gagcagtacg 180
tgtgggagtc ccaggccggt ggctccttca ccgtcactcg tgatacgtct ggggagcagc 240
tcggcagggg taccaagatg gtcctctacc tcaaggacga ccagatggaa taccttgagg 300
agcgccgcat caaggatcta gttaagaagc actctgagtt tatcagctac cccatctccc 360

tgtggactga gaagaccact gaga

384

<210> 11123
<211> 372
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-E9

<400> 11123

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acaagatccg gcaggagctc aacaagacca gcaaggagat cggcaagctc aaggccaaaa 120
agcaggatgc aacggagctg atacagagca cagaggagat taagaggagg ctggccgcca 180
aggagaagga ggtggaggag gcaaagacca ccctcgatgc caagctcgtc accattggca 240
acctcgtgca tgaatctgtg cccatcagcg gcgacgaggc aaacaatgct attgtccgga 300
catggggaga gaggagactg gaggagaact tgaagaatca tgtggatctt tgcataatgc 360
ttgacattgc at 372

<210> 11124
<211> 323
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-F10

<400> 11124

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gcatgatgcg gcttgaagct acgtcattat ttccccaag aggaagggat gatgcaggac 120
atcagcggtg ggtatttccc tcagtgatga aactgaggtt atcgaaccag taggagaacc 180
aagcaacaca acgtaaacag cccctgcaca cagataacaa atcctcgcaa cccgacgtgg 240
taaaggggtt gtcaatccct ttcaggaac gatgccagaa attggcacgt ggacgggaga 300
aagttgtaat agattgatag atc 323

<210> 11125
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-F11

<400> 11125

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acttggggaga gcttatcttc ttcgccgtat tgagaatggg atcctgtaca ccgaagagcg 120
atatggctaa cagcgaaact ctttgtttca tccatttgag tagaattaat acgtatcatg 180
ctagtgtaat tagaaagagt tcgggttcat gtggttgatt ggagacaact taattttagc 240
aggcattttc tgcgggggaca acttcggcaa attgaacaat ggctaaattg accaacaagg 300
ggtttgaacc taattcaatc caataaccct tttggggggg aaattataag gtttgcaaaa 360
gaaccatgct tgcaaaaatg tatctcgatt ggatgattgt atcctcgact catagtgggt 420
aaccaaccta gtgtgggtttt agtcc 445

<210> 11126

<211> 403

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-F12

<400> 11126

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agtttttcgt agtttagatc gagtctgttc ttcataccta cagtccacga aaaaatgaaa 120
ttaggggttag ttcatcatat ccgaaccaat ctgagccttt gcataatctt tttaggggtt 180
tgctttgttg aatttgcggt tgcacgtcgc tgtctagttg ctggtcttag cgttagtctt 240
ttagagtttc gagttctggg cataagttgt cacgccgcca ccgcaccatc atcatcgccc 300
ctgtcaccta ccaccaccgc tctattaatt tccaccacgt gctatgcact gttcattgtc 360
ataatcatag ttgaggtcat tcacatcttc acctgattca atc 403

<210> 11127

<211> 405

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-F2

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ttcctataga cagtcgacga tggcgtgtat tcatttgga ttcacaagac ttggccttga 180
agttccccgaa gaagagatgt tcacgtcatc atttgcatca gccagggttct tgaagtaaaa 240
gaatttgtct ccataaaaga gcgtttacgt cgttgggtgat gatggcattt tggacgagct 300
caagttagat ggccttgact gtcatgggtg tcccaggat ggcattgacaa acatacggtt 360
ggaggcaaac atctacttcc accaggatac gagtgttcga actgt 405

<210> 11128
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-F3

<400> 11128

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cagttagaac aaaacgcctt tgccttggaa agggaaactt catattggct gcaaaaccca 120
acctaagagg cggccggcag gagctgcaga agcagcacac accaacagca agccgaggca 180
acttgggaag cggaggcggc aataatgact tgctgaccac ggggcagtct gccaaagcat 240
aatcccatt cttctcataa gctatagcca tgaccaaaga cgacatcgca acgtgcccct 300
ccctcctatg cctcaaactg tgtaccagcg agagactgta ccagtgtaga gaagcccttg 360
cgaaactatt atttagttag aaggctgatt gctgatgaac attgatttta actataaaca 420
tatatat 427

<210> 11129
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-F4

<400> 11129

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ggggtccccg agacgtgga gttgctgcga aaattgggca agaaattagt ttttgtaaca 120

aacaattcta ggaagtcgag aacgcagtat tcaaagaaat tcaaaacact tggccttgaa 180
gttccccgagg aagagatctt cacgtcatca tttgcagcag ccatgttctt gaagttaaata 240
aattttttctc cagaaaagaa ggtttatgtt gttggtgagg atggcatttt ggacgagctc 300
aagttacctg gctttgaatg ttttggtggt ccagaggatg gcaagaaaaa cataatgttg 360
gaggcaaaact tctacttcga ccacgacaaa agtggttgag ctgtcgttgt tggacttgat 420
cagtacttca actattacaa aatgc 445

<210> 11130
<211> 225
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-F9

<400> 11130

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gttgcggtaa tcaatgagga gattctggtg cacgcgggtg tgtttgacac tcagttcagt 180
tgaggcagcc ggtaatgttg ttgcggatcc atgtcaagct cgatg 225

<210> 11131
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-G11

<400> 11131

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ttagatcgag tctgttcttc atacctatag tccacgaaaa agccgaaaaa attagtgtta 180
gttcatecca tccgaaccaa tctgagactt tgcataatct tttctgtatc tgctttgttg 240
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cgagttctgt tcacaggttg tcacgtcgcc ggtgccatat atcaccaccg catcatcatc 360
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<210> 11132
 <211> 449
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
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 <400> 11132

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 atgcaactgg cctataaaaa ttgtaccggc ccttggttgca gtcacattga gggacatgta 180
 gttgtagttg ggttgcaaca cttgtggttg caagtccaat ggtggacata ataacacccc 240
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 atagttgcaa ttctaagtag gttgacgtat aactagctga caacccccgt ttggaccag 360
 ttgtagttgc attggggcat gaacttgacg tcggggttgca attcttgcaa ttacaagtct 420
 agtgatgggc atgcaactgg caacaacca 449

<210> 11133
 <211> 410
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-031-Q1-E1-G2

 <400> 11133

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 atgggatgaa tttggtgttc taaagaaaga tagtgcccag atgcaaaatc aagtgtccaa 180
 gctgcaagaa gatgtacaag ccattagtgc caagcaagga gagattccag caactgttgg 240
 aatagtgga caggtagtgc tggatttggg taagcaatta tcaggcatca ataattgtct 300
 cctgacatta gtgaaatcaa ctgagcaagg gctgcaagct gatcaccctt ccagttctcg 360
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<210> 11134
 <211> 164

<212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
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 ctgatggttg cacngtggca tccgctgcag cagacgagac cctgcgcttt tggaatgtgt 120
 ttctgatgc tccgaagtct gcattgaaag agaagacttc acag 164

<210> 11135
 <211> 354
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
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<210> 11136
 <211> 426
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-031-Q1-E1-H1
 <400> 11136
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 gccgggcaaa accgagaggc caactctgca agctccaatg acacctccat ggacatggtt 180
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accaggaagc gtcgagtgcc agtattttct ctgggttttg tatgttatgt atttttccta 300
aagctcatgc actgtgtggc tttatagtgg cacacctggc aattcactta aaagttattg 360
gatttgTTTT gttttgttca agcctgtttg gagagaaatc tatatgtatg cctggttcat 420
gtcttg 426

<210> 11137
<211> 336
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-031-Q1-E1-H10
<400> 11137

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atatggctag tcaagccata gtatatacct atatttgtca ggctgatcat gctagagagt 180
aaactacgat caaatagtcg gtttcatgta accaatttat ccagcatatc ctatggagta 240
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<210> 11138
<211> 381
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-031-Q1-E1-H11
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gcaactgcc aacataacgag atggcaactg ccaacataac tagatggcaa ctgccaacat 180
aactagtgg caactaacag aaatacatgg caactcttct ctttcttcat gccctccaac 240
ttgatgattg aaggaacata cgttaccttc ttttttgcaa aataccatga tggcacctga 300
ttttttttat tttaaaattg ttgtacatca gcacatttac gtcgatcgtc gtgatcaacc 360
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<210> 11139
 <211> 361
 <212> DNA
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 <223> unsure at all n locations
 <223> Clone ID: LIB31-031-Q1-E1-H12

 <400> 11139

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cttcgggccg gatgatacgc catgggacgg aggcacgttc aagcttacct tgcagtttac 180
agaagattac cccaacaagc cgccaactgt tcgttttgtc tctaggatgt ttcacccaaa 240
tatttatgca gatgggagca tctgcttgga tattctacag aatcagtgga gccctatata 300
tgacgttgct gccatattga cttctattca gtccttgctg tgtgatccna aaccctaactc 360
t                                                                 361
  
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<210> 11140
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 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-031-Q1-E1-H3

 <400> 11140

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gcagcggcag tagatgatct tcgttcagag gtgacggcat ctgcctggct gaatgatctc 180
cgtcacaaaa tcgagcaaac tagaatcctg agcactttct atcgatctgc atctgccttg 240
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ctaagacctg tatctaattg gacacagggt gtaatgagga gagctcacag tgtagcacia 360
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<210> 11141
 <211> 411
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-031-Q1-E1-H4

<400> 11141

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ttgcggatcc atcttctgag cctcgtcat atcaggtgc cccgcgcatt ccacattggc 180

gagaggctat ggagcaagag tttcatgctc tccttcgtaa caagacatgg actctcattc 240

ctccccacc acgggtaaat attattgact caaaatgggt attcaaagtg aagaagcatt 300

cggatggatc tattgagcgt tacaaagcgc gacttggtgc tcgcggtttt cggcagcgcc 360

atggtcttga ctatgaggac accttcagtc ctgtcgtcaa gcctaacact a 411

<210> 11142

<211> 410

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-031-Q1-E1-H6

<400> 11142

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agtgtaaatc tgttgggtgtg cttcttactc ctgatgatgc tacagagtat cgcagtattg 120

ttggtggcct acaatacctc actatcactc gaccggatct ttcctttgca gttaaccgtt 180

tctgggaatt acctcaaggc ccttcttgac acacattggg ctgcatttaa gcacattctg 240

cattgcgttc gtctcactgt ctttttttgg ttacaccttc ggcttgcttc gtctatgggtg 300

ttgtctgcct tttctgacgc ggattgggca aggagtccgg atgataggcg atccacgggg 360

ggatatgccg tgttcttttg tccaaatttg atcgctgga atgctcgaaa 410

<210> 11143

<211> 432

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-031-Q1-E1-H8

<400> 11143

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tgcaaagttt gcagccgtcg ctgcattgtg cgtccaatac gaagccgact tccggccaaa 180
catgagcatc gtcgtcaagg cgctccaacc cctgctgaac gcgcgagcag cccaccccg 240
ggctgaacac gctggacgct aagctgcact ccggcctttt gtatgatata atagataagg 300
aaaaatgagc catcaattgt tgttcttgcg gggcatgtgg caggcggttt ttgtacattt 360
gtgattaatc ttcccaagtt gtaaccctcg agattctagt accagaaata tttgattctt 420
tgtatccggt gc 432

<210> 11144
<211> 317
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-031-Q1-E1-H9

<400> 11144

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cctccgactg caggctcctc cgcgaggact agctctagt actccatgac tccaaggagt 180
tccaaagcat gaacaggatc tacaaggagg accatcgtea gtcaagatct gctgctcgca 240
aggccaacga cgaagcccta ggaactcctg ctgttgacgc tcaccactat catccatttt 300
cgattttttt catatgc 317

<210> 11145
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-A1

<400> 11145

cgcggttcga cgatgctcac gacaatgatg catatgcagg tgggattgga cgcaagaac 60
gagctctgtg caagctgcat ggattatcat ctagcatgac gatgacctgc cgctgggagc 120
agtcgagacc ggaccaaagt gccagcggg cctgtcccc tgaaccggac cggcgaggcg 180

aaagctcggg caggggtgagg gatctagcga tggcgagggg gcgctagctg cgtgtgtgtg 240
 tgtgtgtgtg tgtgtgttgt gcctttgtgc gtgcccagag tggttgcgtg cgtttgtgcc 300
 atgccctatc ctaaagagca aatcctccgg atgcttggtg cagacaaaga ggcagtccat 360
 ctatggtagc atctcatctt ggggaactct gccgccggc ggcactgtca ccacatacta 420
 ctatgtacgt acatcggtg 439

<210> 11146
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-A12

<400> 11146

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 aaactctctt ggggcatgct gatggcagga aacatagggc aaaagcaaaa gcctttcatg 120
 cttctcagaa gcaagaaaat ggagctgaac aaactccaag cgacaaggaa actggtggag 180
 caccaacaac agcatctaca gaactaatg acgggaaggg tgctgacagt gaaagagatg 240
 ctgacgagga cgttgtgacg agaaagagaa cagatagcac aacctcggag gagccagata 300
 atgcaaaaag acaaaattta tcgaacttga agactgggtg ggcgacacaa tctgaaaatg 360
 gagaagcggg actcaaaaca cagagcaaaa gtgctgcaga agaactggtc aatgatgcca 420
 atcatcaaga tattaag 437

<210> 11147
 <211> 442
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-A3

<400> 11147

cggcgtcaac gccagcgcca ccactctcaa gagtcttaaa gcctcactcc tctccttcca 60
 ccacctctcc acacacacca tctctgtcag acatggcgcc ttccgcgacc tgccgtctcc 120
 actccatggc atccgtctcc cgcgtctctc gcccgcgccc gcgtctcgcc gctcctcgtc 180
 tcggatgcgg actgagagtt ggatgctctg tgccagcata tggaagtgtt gccacggaga 240

aggcctagtg gggattggcc attgcgccct cacgagcgac cactcttggt ccggttggtca 300
ggagccgtca aattttctgc aacgcagaag cttacatttc tagtaacctg ccagcgagca 360
agcctactgg agcaagccag tacgagaaaa tcgttgcgct actcactact cttttccctg 420
tctgggtcat attacgtaca gt 442

<210> 11148
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-A8

<400> 11148
attcgccggt cgacacctga atctcgggac gagattctgt caagtggggg cgagttgtca 60
catccctagt ctggtatgac ctaggctagc tagctatttg tgcatacat ttaaatttca 120
tttaaatttg aaatgaggat tgggtgaacc ctcagaatca tttttgaaaa tgacccaaat 180
aaaaatttct ccaaaatggt ccaagaagat gctcatgttg ccctctgacc atattggaca 240
gagatagaaa tccatgcaat attttttagga gctcatggac atttactttg gccatttgga 300
caaattcgat aaatatttgc attggtaata taattctata tatatgaaat atggcccaca 360
ccttatgcca tttatcaaat agctctggaa taatatatcc agc 403

<210> 11149
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-A9

<400> 11149
gggtcgacgt tcacataaca ccactagagg ctagacaaca tacatctcat caaaatatcg 60
aacgaatacc caattcacat gactactaat agcaagactt ctcccttgtc ctcagaaaca 120
aatgtaacta ctcacaaagc atattcatgt tcataatcag aggggtaata atgtgaataa 180
aggatctgaa catacgatct tccaccaaata aaaccaacta gcatcaacta caaggagtaa 240
tcaacactac tagcaacctc ctagcaccaa tcctggactt ggggacaaga attggatata 300
agagattaac tagggtttgg agatgagatg gtgctggtga agatggttgg ggagattgcc 360

ctctcccgat gagaggagcg ttggtgatga cgatggtgat gatttcccc tccgggaggg 420
aagtgtccgc gacagaata 439

<210> 11150
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-B1

<400> 11150

gatcatggtg cggtcaaga aactcagcta tgggcacttc gacaagagca ctatgacccg 60
tgctcgtcgc gcagaaggtc tgcgtagaag gtctgcgtca gggatatacat ggggtgcacc 120
accagccagc tcgacgagct cgcgcgcgag accgcgcgcg cactcaccgc ctcccagcct 180
gactatgcct ctcttgccgc gaggattgtt gtgtccaacc tgccgccaag tggaaatagt 240
ctgtgtggcg ctcataaata aagagcattc ttgtagaaag ctgagggacg aggttcgtaa 300
ccgagagtca tgtgcagagc tggaggaaga agttgcgagg cttggaactc tccttgtgaa 360
aggctcaagg acagcagtga ggacaatgcc tcttttagttg taattgtgat ac 412

<210> 11151
<211> 446
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-B2

<400> 11151

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ctatcaagtg gtatcagttt tcaggttgct cggtgagaat ttccagtttc gcctagatta 120
gatttatatt cttacctatt gtccaagaaa aagccacaaa aaagttagat ctattcatcc 180
ttttgtccaa gccagtctga gcctttgcaa ttttctattc attgcttgca tgattgaatt 240
atcggttgca tcacgtgtgc gagttgctgg tcttatggtc tagttcgttt agagtttcga 300
gttctgttca cattagtcac gtgcgcgtg catcgttatc ccttctgctg tccaacacac 360
catccatcaa attccaccac gtgctacca tagttcattg tcacaatcat agttgaggtc 420
gttcacatct tcgcttgatc caatct 446

<210> 11152
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-B3

<400> 11152

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ttcaaagtgg aatttgatat cagatatggc tcaaagggtga ccaagcactg tttagcaaaa 120
tgaattagct taattaaaga gggttactgt acctcattac ataggggtgt tacacctcca 180
caaccttatt cgcgctcagc agcactgcag cataaacctt agctctcctc tcaactcctc 240
acttccactt ccatggcatg gccgtacaac attactgttc gtgaaatgga acttctcacc 300
atgtgtgata tcccggcgcc actggacacg cgctgtcag tgggatggat tctgagtgtc 360
gaggtcttct tgtggtgctt actccccatc ggtatcggtg cctttgcgca cctcgtttgt 420
atgtttcggg cacgtctga 439

<210> 11153
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-B4

<400> 11153

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gcagctcaag caacagcatt tcattgggca cttacagttc ttttcatatc tatggcacca 120
tagatactga cagctgggtg aggccacacc tgcagcatga tggctcatgt ttgctgctgc 180
aagcatacga tgatgacatt gacaaaatct gctatgtgat gaatgacctc gcacgtggtg 240
gtgtcgatgg ctctgctgat cgtatcatgg atgacacgcc ttactcgaat ggcattccatg 300
atttcatgat tttgccagca ggcaagaatg gggagatcaa gaagcagcta accatctatc 360
aagaactcga gcagtacttc tcaaaactca tgctttagcg tgaccgtaac agacaatttg 420
ctgccttgga aatgttgaaa aatgttctgc 450

<210> 11154

<211> 427
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-032-Q1-E1-C11

 <400> 11154

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gcggaaatca tctatcaaga tgccttcgt acctcggggc aattctacct cagaaatcaa  120
ctgtccaaca gtgacatcga cacaatgcta cgaatgcagg ctgacaacga ccgttatttc  180
atgactccca cgatagacgg cggcttcac cacgctccgg tcccttgagt cgagtcgaaa  240
gaagtgatga tgtgtctagt tctgaaacat cgattggctc atgttgtaat taaactttaa  300
tgaacttgta gtatgectct ttggtttcga gagtcgttca acttagatgt aatcgatgct  360
attaatgtct tgctttttctc ttccgatcgt tctgttgcat acttatatat tgcttatgta  420
ttgtctg                                     427
  
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<210> 11155
 <211> 396
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-032-Q1-E1-C12

 <400> 11155

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tttgggtgct agtgtttcca cgattccaaa aactttgtgt aatgtgctag gtttccgtca   60
atattgatgat tgttctttga atttgcactc cgcggattcc accattaaga aacctatggg  120
aaggattaat gatgttctta ttgttgcaaa taggaatttt ctgccatac attttattgt  180
ccttgatata gatttcaatc cgacatgtcc tattattctt ggtagacctt tccttagaac  240
ggttggtgca attattgata tgaaagaagg aaatattata ttacaatttc cattaaggaa  300
aggcattgaa cactttccta ggaagaaaat taaattacct tatgaatcta ttatgagagt  360
cacttatgga ttgcatacca aagatgacaa taccta                                     396
  
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<210> 11156
 <211> 425
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-C3

<400> 11156

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cccgccgtgc ctcgtggcgc atcatttcct ccatcgagca gaatgaagag agccgtggca 120
atgaggaccg tgtcacactc atcaaggact accgtggaaa gattgaggtt gagctcacta 180
agatctgtga tggatcctc aagcttcttg attcccacct tgtcccctca tccactgctc 240
cagagtccaa ggtcttctac ctaaagatga acggtgatta ctacaggtac cttgcggagt 300
tcaagagtgg aactgagagg aaggatgctg ctgagaacac catggtggca taaaaagctg 360
ctcaggagat tgcactgaaa gagctgcccc cgactcatcc tattaggctt gggctggcac 420
tcaac 425

<210> 11157

<211> 450

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-D1

<400> 11157

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gctgcgggaa ctcttgggtca tatgcacaag gtaatacata aatggaataa ctttgtttac 120
atgatagata tatgatctta agatgaaaac agtgcaattg acacaatatt gggaataagt 180
aatcccgtat gacttgcata agatgagcac caagatccaa atccatgtgg ttgaagacaa 240
caaacacatg caagcaacta atcaaaaatg atataagata ttcttctgac atacttgctt 300
agtgatgatt gttttttcat ctattaaagc cactggataa tggagctcac atgagaatat 360
tcatgaaaag gactaatatt atttatgcaa attggtaaga acatgattta atattatgca 420
ttccatttgt tattttacca gaaatttgct 450

<210> 11158

<211> 401

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-D12

<400> 11158

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acaggtcgag gagaacaatg tgtgctgcc a ctgcgagcat gcatgaacca gtcaaagatc 120
tgtcggcagc atgtaatgaa tgaagtcac agatgtccaa cactagcatg catggaagga 180
agccatgatc ttagcatgct tttattttgc gtctgattaa aactctgggtg tatcaatatg 240
ctgctgcttt ggtgttacct tggattcaac ttctgacaag agctctgatg catgaacatg 300
ttactgactt tgggtgccatt ttcagttcat gcttcttctt aaatgttcga gtgttctcct 360
tcttgacgtg gattttcgtt ctgtatgata cctgctgagt g 401

<210> 11159

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-D2

<400> 11159

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cctccaccgc acgctaate accggctact gttcaaccag ccttctccac gagctcctgt 120
tcaaccaccc ctccacgggc tactgttcat cctgccctcc accatctact gttcatcctg 180
ccctccacgg ggtggctctg ttcattcagc cctccacggg gtcctgttca tccagcccca 240
accgggtcga tcgatcgagg tctgttcat ccagaggcaa caccacgggg tcttgttcat 300
ccacccccac caggaactgt tcatccaaac cccccgcaac gctcactgtt catccagagg 360
tagcatcgat cggcttcagt tagcagcagt agccaaggaa tcgctcgatc gggttcagtt 420
aacagccatc gatcgatcgc tcgggttc 448

<210> 11160

<211> 455

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-032-Q1-E1-D4

<400> 11160

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gaaagctacc caaaccgcag gttgttacct tgattagagg aggaagcact tgacgcggcc 120
gaccggccac ctctgtggccg cgacagagag gcctgtcggc cctccactta agccgcaccc 180
cgtaccaagg tacgggaata tgcgccggac ttacgagata tggtggagga caaggcaagg 240
caaacaagat cgatctacgg atcacgtggg cgccccacgg ctcgagacgg taaccgtcac 300
gccggccacg aattcggcag ggccgaacac agtagacaaa gctcattgga gctacgtcgt 360
gatatagccc agtacagagg cgccgcacac ccactatgct tcacagacga nataatggat 420
catcaaatcc ccgagggttt caaaccgta aacat 455

<210> 11161
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-E1

<400> 11161

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ccagagaaca gagcaagcta cttgaagtgc tccagcaatg acataaccaa gatttggcta 180
gtatagagga tcgacgacaa agaacagagg atggcaccaa aaggaacagt gttcgttcca 240
atatcgcagt tcccccttaa gaaagtccgc aaggactgca cttacttgag cactccggcg 300
atgaagatcc cggacactat gcagaacatc cactcctgcg agaactgggt gccgagaagg 360
gtgatgagcg cgtggcatat cgccggaata cttcatgtcc tggaaggggt gagcgagcac 420
gagtgcggtg agcacatgat ggactctga 449

<210> 11162
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-E11

<400> 11162

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tttggatcgg cagagagcta gaggcctcgg tgctctggag gatgttaa at ttgagaacgc 180
 aaattgttgt caaataactt tgcttctctc atttgaagaa tttagtattg ttgggagcct 240
 ttgggcaagc tggtatctct tatctgaagt tcccattttc tcctctcccc ctttttggtt 300
 tttgcctggg tagcgatcag gtccaatcct ctgggaattc tcctgtgtgt acaaaaatgg 360
 aaacagcctt ggcattgttt gttatctttt gctgggaagt ttctccatcg ctttgcaatc 420
 tatagtgaag tggagcagaa aatggattgg a 451

<210> 11163
 <211> 449
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-032-Q1-E1-E3
 <400> 11163

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 agttttgctc catgtactta tggttatcta aaaaggctag tagcatttgt aagtgtgtgt 180
 ttagttccta ccttcagaat atttttgtgt agactatggt cttgaccaca tcctccttgt 240
 tgttagttca tttgctatat aaaagaaaat aacagggtgtg atcaagtcaa taggatatta 300
 cttgcgagtg ttttttctaa gtattccctt tctcttatgt ttctcatgaa ctccttgagc 360
 tttatgtgga aactcgggc aacaatatca gacctttctc ctgcacaaaa aaaaaaaaaa 420
 aaaaaaaaaa aaaaaaaagc ggccgctct 449

<210> 11164
 <211> 453
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-032-Q1-E1-E4
 <400> 11164

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 ctaaaccac tccaaagaag agagggtgtt tattttctcag tcctgaagat atgcaagagg 180

caaagaaatc aatgaaagaa aaaggtatta aagctgaaga tgtaagaat ttaccaccta 240
 ttgaagaaat acatggtctt aatataccgc ctattgaaga accacattgt cttgataact 300
 cgacacaggt agtaaaggta aattctctct atagatatga taaagttgaa atcccctcta 360
 ctaaatttca tagcccatgc ttagatgaat ttgatgactt tatggctaga caagaaagtt 420
 ttaatgcttg tgttggtaga gagttaaaga ata 453

<210> 11165
 <211> 432
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-E9

<400> 11165

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 tcgccaaagc tgccctcaat gcttacacaa ggattctcgc caagaagtac cctaggatgc 180
 gcatcaactg tttgacgcct ggttatgtca agagcgacat gtcgatgcac atgggagttt 240
 tgacgcctga ggagggcgct agcaaccggg tgaaggctgc tctcttgccc gacgatggcc 300
 cgacgggtgc ttattttgat agggatggcg tggcctcgtt tgtgtgactc tgtcgtacgt 360
 gtaatggttt cgtccggttt tactttcaga atatgagaca cctgtaactg tagttgtcaa 420
 taaccattgt gc 432

<210> 11166
 <211> 447
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-F3

<400> 11166

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 gcgtgccgag ggtgaagcag aggccaagta cctgtctggc ctcggtatcg cccgccagcg 180
 ccaggccatt gtggatggcc tgaggggcaa cgtcctgggc ttctcagtca atgtgcctgg 240

caccactgca aacgatgtga tggacatggt gctgatcacc cagtacttcg atactatgaa 300
agagattggc ggcgtctcca agtcctcggc ggtgttcac ccccatggcc ctgggtgcgg 360
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ctagcagttt gcttcgccgg catgaac 447

<210> 11167
<211> 431
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-032-Q1-E1-F4
<400> 11167

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tgcaccggaa ctctggcttg gctgtggctg gattagcagc agacggtagg cagatagtct 180
caagagcaaa gtcagaagca gcccaattatg aaaagggtata cggagaaccc atgcctgtaa 240
aggaattagc tgatecgcgtt gctagctatg ttcatctgtg tacactctac tgggtggctca 300
ggccttttgg ccgtggagtt attcttggag gctatgatag ggatgggcca cagctctaca 360
tgatecgaacc ttcaggcctc tcctataaat attttgggtgc tgctctgggt aaaggaagac 420
aagctgcaaa g 431

<210> 11168
<211> 415
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-032-Q1-E1-F5
<400> 11168

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tgggtgtgatt atgattgtgc agtcatatgg gtagtgatat tttctcaata gaccattggt 180
ctatttcaat tttctcatcc actccaaaac accagatgcc tccgagacgt gaccccggtc 240
tcaacttccc gccggagctc acccagctga tccagcagca gaatgcctc atgcagatgc 300

tcatctagaa ccagaacaac aagaacaacg atccaccgcc accaccccct gttgacaact 360
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<210> 11169
 <211> 436
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-G12

<400> 11169

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 aagtccttag ttacccttta aagtatatac gtgaggcata gccgcgcctg ttagttggag 180
 ctaaaggaac tgtagaggag gtttatgagg aaccgtccca gtgatgtttt cgccaaaaat 240
 aacgccccag taatgttaaa gatttgtttt ttaagcaaca gtgatgatcg cttcactact 300
 tcttataaaa caacagagtt ggtgatgatg gtgtgcctgc catcttgcaa tatatgccgt 360
 ctgatctata tctgacggtt aggaaggaaa atatgacaat tttgcaaaaa aatatctgca 420
 ctctctcca catttg 436

<210> 11170
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-G2

<400> 11170

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 gctccaaatc ttgaaccggt ttcaccattg gattccttgc gtcaagatct tcaaaactag 180
 atcccatggt gatagatttt aacgaacttt tttccacaa aaaaccgaaa aaattgaacc 240
 agtagcacgt ttttttctct ttccgaatga ggcacaccgc cgctctctgc gacatcacia 300
 ccgtgcctct cgtgaaagca aatccgtgac tctcgtggaa gaaaaaaaac agaaaacacg 360
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445

<210> 11171
<211> 452
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-032-Q1-E1-G4

<400> 11171

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caaacgtaac cactcacaaa gcatattcat gttcataatc agaggagtaa taatgatcat 180
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ccccaagct taaaccttac cttgtcttca agcaattcag ttgataaact gaaagtgata 360
aagaacaact ttataaact ctgtttgctc ttgttattgt aaacatgaaa tgccagcatt 420
caagttttag caaatattat gaactaacca ta 452

<210> 11172
<211> 411
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-G6

<400> 11172

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tggactctgg agcttcttcc catgtgacct ctgatcactc tcagcttgtg tcttgccagc 120
cagtgcggga tgggtgcctct gttcagactg ctgatggtac accttgttct gttactcatc 180
agggttctct ttgcacatcc aagttttctg ttcttgccat ctcccttgct ctagagctgt 240
ccatgaatct tatgtctatt ggccagcttg ctgatatgaa ctactttggt gggtttgatg 300
actcattttg ttatgtgcag gaccgtcaga gcaagagggt cattggaact ggccatcgcc 360
gtagaggatt cacatccctc tacatccttg acaccttaca ccttccttca g 411

<210> 11173
 <211> 371
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-G7

<400> 11173

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 ggatggcaac tgggtgtgca ctgagcatga tatgatcacc aaaccaatg cggactgcca 120
 tgtgaataac tacatccaag ttgccaagga tggtagcagc gatgaataga ctgcgatgca 180
 ggagcgggtg actgggccat accccgatcc agcacaagac gacacgctga tcactaaaga 240
 ttacctggaa cagtacaccg agcaataaga gaacttcctt tttggtgcga ccggctcgag 300
 atgcagccgg gaacacctat tgatgaaatg aaatgaaact agactacgca tctctgaaac 360
 gctgctgtgc t 371

<210> 11174
 <211> 425
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-G9

<400> 11174

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 ggccccacag tcagacgacg acagcaacaa ggatctggga ctgcctgaga aagtcgaata 180
 gctcgacagt ttgccggaag ttgaattgaa gtgtgcagcc cttgcaagcc acgactgtgc 240
 tagcagggtg tattcatctt cttttctgtt atgttctgtt ttttattgga ttatcgatca 300
 aaagcttgta gtttgaacca aaattacttt tttcagcttg aaaacttagt agatcttctc 360
 tctgttatgt acaatacgag caaaatttca tctttatgca tcaaaccttc attttctcta 420
 agaat 425

<210> 11175
 <211> 388
 <212> DNA

<400> 11177

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caattaactt ggcctacgcg tttggactca ctgaacagtt tgagccagtg caattgctga 180
aagcatatct gagggaggtc aagaagggtg cacatgccaa gaatggaaaa atgtctcctg 240
gagcacagaa tgagatgaat gagcgtgagc tgtctgcact gaaagctgtg atcaagtgcg 300
tcgaggagca caaactggag gagcaatatc cggtggaccc acttcagaaa agggtgattc 360
agctggagaa ggccaaggca gacaagagga gggctgtcga agccgccaag ccacagtcca 420
agaggccgcg tgccaacgga tcgctctaata gcacccgtg 459

<210> 11178

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-A3

<400> 11178

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tgtatcccag tttgtgctaa ctttcttaag gcaaacttgt ttaagttagg tctgtactca 180
aatattgttg cttccgctga tccgtctatc atcgagctct tgtattcgag ccctcaaggc 240
ccctggcttg taaaaaatg cttgtacaac ttattttaat ttgtaaagtt gtgttgatgaa 300
aacttctcct gggctccctga ttttgatcgt acacttttgc gtgtgataag aaaacggcca 360
aattaggggg atcatagttt tccaaaatca cccttggtgg acaaacttt t 411

<210> 11179

<211> 434

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-B1

<400> 11179

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aagaggagtt gagcgagaga ttggctccct gcaaatggag gagaagaagc tggttgctga 120
gatcaagaac actgccaaga ctggaaatga ggctgcaacc aaaattctag cccggcaact 180
agtcaggctt aggcaacaaa tcgtcaattt acaatgtaca cgggcgcaga tacgtggagt 240
agctactcac acacaggcaa tgtatgctgg aacttcaata tctgctggaa tgaaacgcgc 300
aagcaaagcg atggcagcaa tgaataagca attggaacca acgaagcaga tgaagcagat 360
tagagaattc cagaagcaat catctcaatt ggacatgacg cttgagatga tgtctgatgc 420
cattgatgaa acac 434

<210> 11180
<211> 300
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-B2

<400> 11180

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gagaagctga taacatcaaa gatgatactt gctgggtcaa agcggagact tcattccgtg 120
cacccaaact ctggcttggc tgtggctggg ttaccagcag acggtaggca catagtctca 180
agagcaaagt ctgaagcatc caattatgaa gaggtatacc gagaacccaa gcctgtaaag 240
gaattaactg attgtgttgc tagctatgtt caaccgtgta cactctactg gtggctcagg 300

<210> 11181
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-B3

<400> 11181

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tataaaatgg gtttatgtgc atttcgttgt ccgtttgatg ttgatttctc cgttcgttgt 180
ttgatcacgt agagtagttc atcacgttgc atgcgtagta tggatatagg gtgccagata 240
tgatatacgc aaatatgaag agaaaaattt aaagtgtgac cagtcagtgc cagtggacac 300

gtccggacac gtccacaaaa gtttgaggag ttcgatttgc tgtctgcggt tgtaaagtct 360
cttaggaccc tgtgggagcc gtaagtgcac g 391

<210> 11182
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-B5

<400> 11182

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gcctactgcg accgccagtc tgtggatatg aaagctatcg cgttcctgtt tgacggtcgc 120
aggctccgtg ccgagcagac cccagatgag cttgagatgg aagatggcga cgagatcgac 180
gccatgctcc accagactgg aggctgccgt ctccctccaa gcgcctacaa gaagccgtcg 240
aaagtcctgc tcgttgtcgg tctacaagac tctgatccat cagtaaagag cacatgaacg 300
aatgaaagtc taaaaaaaaac ttgtgaaggt ctggcccat gccatagctg aaggacatta 360
tggggggcctt ttgttttagtg ccgtttggg 389

<210> 11183
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-C2

<400> 11183

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gcgccgtaca taccgtgctc acggacgcat caatccttac atgtccaacc cctgccacat 120
tgagctgatc ttgtcagaga aggaagagcc tgtgaagaag gaggctgata acgtcgtcgc 180
accaaggaaa gctatctaag ctaccggaat ggatgcattc gtccaacagt cttagtgtga 240
gttcttctca agtacctttg ttggcagtgt ttgttgctc cttgatgttt ttgttacaa 300
cattgagtaa ggatttgta aggttgatgc taacctgtg attgcgagtg gtctttatat 360
gctaaaacag tttcagatat ttgagcatta gcacaccaga acttatttct cagagatgct 420
ggtcctttcg ggctcttc 438

<210> 11184
 <211> 430
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-043-Q1-E1-C4

 <400> 11184

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 ggggtgtgaag agttccagtt gctgcaaatac aagttgccat gtgctctcag caccactcac 180
 tacacagagt agttgcgggt atacgataatt ttgtgatcct ggtgggtgttg tgataatcat 240
 gcacattttt gtcctacaac aattagatac tcctttttgc ttttaattccc catcaggaga 300
 gatattgtcg tagagtaatac agttatctat caacatacat gtaaaggctg ggtagagatt 360
 tgtcaatgtg atacatcagt agaataatac ctatttttca gaaagaagat aatctacata 420
 tatagaagtg 430

<210> 11185
 <211> 251
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-043-Q1-E1-D3

 <400> 11185

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 tgatctctga cccttaccgg gaaagtctca cttgagtgtt ttgacgttgc gaaagtctct 180
 agcaatgagc gtatatctca ccaagcctgt gctgtcacta catctaaaga atgtccgtcg 240
 ctttgtcggg t 251

<210> 11186
 <211> 309
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-043-Q1-E1-E1

<400> 11186

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atcgccctgt ggttcctga gggcattgca gagtggagga gcagctagca caactggatc 120

tatgaggcct aagatgtgtc atgagtgggt gagtgcaggt ttcattaagc atctaccaa 180

ctagtctttg gttgtttaca gttttgagat ttgtatcttg ggaaccttggt ttgtgtgaac 240

tgaagtatc tccttgtgct tgggcatcca agcggtatct gctgctctat atttgatata 300

tggtattgc 309

<210> 11187

<211> 301

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-F2

<400> 11187

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ctatctagcg ggagagggga gggagcgttg gaggaaccgg atgaagatga gtttcatcgt 180

gatgatgtc atcgttatga ccgcagctct cttctatgtc atggtagttt agatgatcga 240

gatcgacttg taatgtgaag acaaactccc tactcgcggt cgtcagagtt gttttataat 300

g 301

<210> 11188

<211> 340

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-F4

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ggtggaagag ctgaccgga gggtaagct cgcgccggcg aactcgctgg gagatctcct 120

gctactgtgc ttcgacgtga gcggggtaca aaacgggcaa gtggtggcga tgatccctga 180

cgtgacgtg gtgctcggcg gcggcgcgac ggtcacgcta aaggcggaga acacgttcct 240

ggatgtgcat gacgggactc tgtgcttggc ggtggcgggc gcgctctgagc acgatactcc 300
 tgtgtccatc atccggaata gcgcgcagca gaacatgcac 340

<210> 11189
 <211> 403
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-F8

<400> 11189

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 ggggaaagg accaagaggg tgcatttcgt caggaacttg atcagggagg tagctggggt 180
 tgctccgtat gagaagcgta tctactgagct tctcaagggt ggcaaggaca agcgtgccct 240
 gaaggtggcg aagcgaaagt tgggtaccca caagagggcg aagaagaaga gagaggagat 300
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<210> 11190
 <211> 207
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-G8

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 ataaccccct tagatcacct gtcaagagtt attcacacta gtatcagggg caagtaaagg 180
 gtttctcggg cgccaaccaa aagggt 207

<210> 11191
 <211> 394
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-H3

<400> 11191

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gagaagctcc ttggtatggc caataagggt gtgaatttaa cgtcgtcctt cgcagctcct 360
aatcaactt tcgggaaaga ccaaatagat cctg 394

<210> 11192

<211> 355

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-H4

<400> 11192

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gggaatgtag ggcataataa caggagccag gcaacccaac ttggccaaaa cttaagtcac 180
attgatgcat ataatggcga agaaaaggta tatatgagca aaaacacata tgtgatgagc 240
ttgatcctcg gagaataagc ttctgtctgg gaagcccca agtatagtgg gcgtacatgc 300
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<210> 11193

<211> 464

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-A1

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 gacagcacag gtatgactat cttgattctg tcataaattt gtcatggatg tacatgcatg 360
 acaaaaaaac gcgacctact gtgacaaaca cgtatcatca cgggaatgta attttttggga 420
 attgaaagtc aaatcaacgg ttcgacaac ctattttttt tttt 464

<210> 11194

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-A10

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 ggaccgggcg aggaggttgc caaggaccaa agtgaggagg tcgccaagga ccaatcttca 180
 tagttcttgt tctccacgg cgttgatcc gctgttgtat ctgatgtca aagtagatgt 240
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 tgttccatgc tctcggtat cctagatggt aggtaatgtc ggaacacagg gggatggtgg 360
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<210> 11195

<211> 368

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-A3

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 accccaaaat gaacagatgg atctcaacta aaacatcaca cgacgtcgcc tgatttaggg 180
 gcgaccctag tgtagctgca cggtagagcg cagccagat gacagaaaac ttatggttat 240
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gccggtgcag ggctacggct tgaaactttg gaatgaacca cagaggtccg tccaggtgcc 360
aactgatg 368

<210> 11196
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-A4

<400> 11196

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cacggtgact ctagcccata atgaacagta attttcttta taccggttaa cggcctgtga 360
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<210> 11197
<211> 382
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-B1

<400> 11197

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aaacaggtaa aactcgtctgc cttccattct gtcagctgcc actatgttgg tgtccaaact 180
gaactgtaaa caaaattatt ttcctgactt tgcaggggta tagagaaaag cttgtggaca 240
tcagggagga gatactgcgg aagcgaagag ccggaaaagct cccaggggac acggcgtcta 300
ccctgaaagc ttggtggcaa gcccacgcca aatggccgta cgcaactgta gtgtgacaga 360
catcccgcac ataccgtcat cg 382

<210> 11198
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-B12

<400> 11198

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aaggaaattt atccagatat ttttccttgc gcctcaggag aaagggttatt ttgtgctcaa  240
tgattatttc cactttgttg accaagaaca agtgcaacct gcacagggtga gagctcacga  300
agcctttgag actaacatgg catccaacac agtccaaaca agtgcagagt acattcatga  360
agaaagtcga acaatgcaag ctgttccagt aacatctgaa gaaaatgatg ctgttgacag  420
ttacacttac tctgaaccac                                     440
  
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<210> 11199
 <211> 389
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-B3

<400> 11199

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atcgaggcag agacccccga tctcgtggcg gcttagcttg ttggccaaaa atgattctga  180
ataggctttg gttgtcagca aggcggcggg gtaaaacgag agaccatctg gctgtgctgc  240
gcgtgctagc tgctcttttc ttgataacga aaacttgttg ccttggggtgt cctattggtc  300
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<210> 11200
 <211> 392
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-B4

<400> 11200

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tcttctgctg caaaacactc agtgccacta tcagtggata accatgtgcc tgccatggga 180
acaggagctt tgaacagttc ttacagtcac catatggcag gtagtgggaa ttcaacctct 240
gttgctgggtg acacgcaacc gatcatgagt gatgcttttt atattgaccc tgatgataag 300
tttatgggca gttcttttga tggactgcct tttgatttca tcggtattaa tagtccaagt 360
cctgaccttg atgaactcga tgaactgctg ga 392

<210> 11201

<211> 377

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-B5

<400> 11201

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atcatgggta ttggattgat atgtgcttgc cttagcgtgt tcatgtacgg gtccccactc 180
actgccgtga gaacgggtgat cgcctcaagg agcgtggagt acatgccctt cttcctctca 240
ttcttctctt tcctcaatgg aggagtctgg gccacgtatg ccataactga caaagatgtc 300
ttccttgggg tccctaattg aataggctgc ttcttgggcg gcatccagct gggtatctat 360
gcaatataca ggaacag 377

<210> 11202

<211> 407

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-B6

<400> 11202

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gagaagtcag agcttcatgc gttaaggtc ccggtccatg cggcgggtgca ggcatcgcc 120
 gtgatttcgt cgggcctggg agaggtgaga gacgggacta ggttggggat tgcaggggca 180
 ttttcaacat ttctctatgg gtccatcttg tcaggggcaa atcatcaaga tttcagcaaa 240
 cgtgtggcaa accattaatg acgacaaaaa tgagggaaaa tcctgaaagt gcaaagaaag 300
 atgtggcaaa tcttcaaatt ccccgagaaa aactgtccc cgatgaagaa gccaaacatt 360
 ctagagttaa ttccaattaa atgagcaagg acagaaccac caaagcc 407

<210> 11203
 <211> 359
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-044-Q1-E1-B8
 <400> 11203

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 tcagggcttt tatggagtca catcttcag ctttgaagga aaagaatccc cagttagagg 180
 tagtgacaca gcttgctcgt ggtcagcatc ctaacttgaa gggcatttac aaaaaccata 240
 acgagagagt ggtttgctc agaaatttag cacctgagga catcatgttg caagctagta 300
 ggctaagggtg ttctctgggc aggaaagtgg tgaagctgag aaccagacac gtgacgaaa 359

<210> 11204
 <211> 386
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-044-Q1-E1-B9
 <400> 11204

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 tgcattaca cagtcagacc gcccggtttt ctaagtattt ccgccggtca ttaaaataaa 180
 ttaaaaaatt ttcatgaagt ttccaaataa attttccttg caattttaaa taacaagtta 240
 taaaataatt taactttcct tgaaaacaat gttccaacat gtattcaca gataattcac 300

taagtacctt aaaaatattc cacgtgtatt aaataaatat tacacgtgta catgtaaaat 360
gtacaacgtg tataataata ctatat 386

<210> 11205
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-C1

<400> 11205

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atcatgaact ccttcatcaa cgacatcttt gagaagctcg ccggtgagtc cgccaagctc 180
gcgcgctaca acaagaagcc caccatcacg tcccgcgaga tccagacctc cgtccgcctc 240
gtcctccctg gcgagctcgc caagcacgcc gtctccgagg gcaccaaggc cgtcaccaag 300
ttcacctcgt cctaggtccc gcgtgcatta gttcttgtgt ttctttcctg ttccctgt 358

<210> 11206
<211> 423
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-C12

<400> 11206

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gttatcatca gattcgcatt cgtgaagaag atattcccaa gacaacattc agaacaagct 180
ttggttctta tgaatatact gtcgtgtctt tcggccttgt caatgtcctt ccaacattct 240
ctcgatgac gaatttcac tccaaccctt ataccaatga attcgtcctg gtgtatctcg 300
atgatatatt ggtcttctcc aagaataaga aggaccatgc caaacatttg cggttgggtgc 360
tcgacaagct tagagagtat aaattctatg cgaagttctc caaatgtgag ttttggctcg 420
atg 423

<210> 11207
 <211> 403
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-044-Q1-E1-C2

 <400> 11207

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 gtgtcttttag gttggatcct tccaatctac actattcttc atcagcgacg tttgctgttc 180
 tgggtgcgctg gttctatggg gccttagcac gaagactttc cgactgtcta ctacaacaag 240
 ctttgcccgg ctccggcgag ggggggctga tgacggcggc gcgctttcgg cccgcttcga 300
 tgcttgtaat tatcggtaga tgggtctatga atctgaatgt aatttttatt atttccggtg 360
 ttcgttgtag tgccatgatt aaagatgaat acatccaatg ttt 403

<210> 11208
 <211> 404
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-044-Q1-E1-C3

 <400> 11208

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 cgttgcccgt tttgcaatcc gacactccca catgcaccgg cgcaccccct cttgtctctt 180
 ttcgtgagcg ggtgtcaaac gttctccgaa tggaccgagg tttgctatgt ggccttggtg 240
 caccaccggt agaccacctg tcaagtttcg ttccttttgg aggctgcttg atgctccaac 300
 ggttaaccgg gtaaccacaa aggcctcttg tgtggtgtag cccaacaccc tccaaaacag 360
 cccaataacc catctaagcc ccctccatgc tctccgcggt toga 404

<210> 11209
 <211> 369
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-044-Q1-E1-C4

<400> 11209

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agcagcacgg atggatcagc gaaagagatg gcatttttct ctgaccacac atactctttg 180
acattctccc attgaaagat ctgcgggtta cttcagctct ggcaccattg aggggtgtgcg 240
ctaattttct ttggcaacta ttgtggcaaa ggctgtagct tccagagtgc taatgcgaaa 300
gcctgagact tgaagtgtta ttgcttcct tgtgataccc taataataaa tgcatttggc 360
gacttcagt 369

<210> 11210

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-C7

<400> 11210

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gatgaacatg ttctgcatga tgttttagctg ttactgcaac tttaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaataaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaccgg ccgccccaaa ggatcaaacc taacttacc 240
ttgaatgcaa cttcaaacc cttcaaaatt gtcacaaaaa ttaaataaac tgcccttcgt 300
ttaaaaaactt cttaacggga aaaaccctgg cttaacaaaa ctaaaccccc ttgaacaaaa 360
acccctttc acaacctggc ttaataccaa aa 392

<210> 11211

<211> 369

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-D1

<400> 11211

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aaattgagat tgatattgag ccactgaca caatcgacag aatcaaggaa cgtgttgagg 120

agaaagacgg tattccacct gttcaacaga ggctcatcta tgctgggaag caactcgctg 180
 atgacaaaac tgctaaggac tacaacatcg aaggtgggtc agtgetccat cttgtgcttg 240
 ctctgacggg cggtcagtag atgcaacctc gacgtggacc gtaaaggcca tttctaccag 300
 aagttgtttg caaacctaaa tctgtgaatt tgccgggtga ttttaagtgc atgtaattga 360
 cgcatttgt 369

<210> 11212
 <211> 387
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-044-Q1-E1-D11
 <400> 11212

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 ccgcccgcga actcaagggc ggtcgaacaa agcagtgcac caatgctagc tctctacatt 180
 tcgcatccgg cgtcgtaatc ccattcagta accgccgctc gatgcattac tatactccag 240
 gggataaacg ccatacttta gcccgcacga gacgtggatc tcggccgcga tccggatgag 300
 gggacgggag atgaggtctt ggctcgtacc ttccggcgacc ttgaaccaat atgccatggc 360
 aggatcatcg caccagcaag atgatgg 387

<210> 11213
 <211> 371
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-044-Q1-E1-D3
 <400> 11213

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 acagtgaagg agagactgcc aagtgagaat gccaacacgg atgctgttcc aacacttggt 180
 gtgaggcgca ggaagaacag tcacgaagac gcgaagcccc tggcgggtgac aaattttaat 240

gcctttgaaa tcattctctt ctccacaggg tttgacctct ctggcctatt cgtcgagaag 300
gagagcaaaa aggaagcaag gttcacttca naacagcctg cctcagccat tgtctccaaa 360
ctggaaactg t 371

<210> 11214
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-D6

<400> 11214

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gtggcaaaaat ttcaaggcag ttgtcgagtt ccgatcatgcc ggtgacttcc agtctgagtc 180
ttccgttgct tctgatgcta gcaactggga agctatcctc aagctgtctc ttcaaaccga 240
catggcaccg aagatgcaca gcaacgagaa tactggactt tctgttgact catcctcttc 300
tcaggcacac acggtgtgaa ggtttcttcc atggagtatg gaactggaag gcgtgaaggt 360
cggaacatg 369

<210> 11215
<211> 398
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-D7

<400> 11215

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ccctcgaaac tggacgcagg gtatccttcg agtacactct gctagctggg attaacgatg 180
aaaaggcgca cgctgaagaa cttgcagcgc tgctgcatgc atgtggaggt ggttatcacg 240
tgaacttgat tccctataac ccggtagaag gatctgagta caagaggccg tacagaaaag 300
cgattcaagc gtttgttgat gcaactggaat ctcggaagat cacagtcagc gttcgacaga 360
cccgtgggct tgacgctaata gcggcttggtg ggcagctc 398

<210> 11216
 <211> 421
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-044-Q1-E1-D9

 <400> 11216

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 atagtctggc tatggcctgc cgagcctata cctagcagct acttcggact tgttaagcgg 180
 cttgtatgtg cctgtccgcg gctctaagcc gtgaagcggg cagtctgtat tgaacgttcg 240
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 aaggggcccgc cggatggcaa tgattattat cgacgcgaac tctatatttga tggcgtcctg 360
 gaggggtccc gccttgtggc ggagcaatgt tcgaacgggt acatattccc atgagaacat 420
 g 421

<210> 11217
 <211> 280
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-044-Q1-E1-E1

 <400> 11217

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 aagcgattga acatgtggac gaggaccact caagtttatt tggcataact gtgatgagtt 120
 cattctgtcc ggcgggtgctc attgtttcca caccagcta ctattacaac cctatcatcc 180
 agatgtcagc tttgccaatc aacgaacaga aacgtgaaca tgacgctggg tcttgcaaat 240
 tccgcatcca tgaccacaag tttgagtga cgaggcccc 280

<210> 11218
 <211> 412
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-044-Q1-E1-E10

<400> 11218

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ggagccatcg tgtacattca tgaataatct tctcaggaga agaaccacat ttacgattaa 180
acaccacatc attcctggta agccacagag ccagcataag gcagccgccc caacaagaat 240
atgtgcagaa aattgttcat caatacccca caactaattg ctgaacatgt tatgcacact 300
gtgtgggggtt acagatttca agattcttga actatggccc atactgcgcg agcaaactta 360
cactcaaaaa atatgtgttt tgatagactc gtcatgttgg caaaagacac at 412

<210> 11219

<211> 363

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-E11

<400> 11219

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ccggaagtga acaacgcggg cacagtcggc atctcggacg actcgtcgta cggagtacgg 120
ccacggcgac catgaccac ggtatgggca tggctatgat gctcagccgg ttgggctgtc 180
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aggactgact tccgttgaga actatactgt acctttaccg cagttggtaa tatcacattc 300
atgtgcgcag caatacatga aatttgaggt cgtgatgctg cttgcagcat acagtatctg 360
atc 363

<210> 11220

<211> 444

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-E12

<400> 11220

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acgacggggt gattctacta cggggcggtta ggatggcgcc acggtgagat gcagggatga 180
cacactgctt gagcgacgtg cgttggaaat ttcctttttt tctgtgaga tgtgcgagag 240
gaggaagacg aagatccagt ggctaaccaa cggtcgcgcg tgctgaatcg gatggccgcg 300
caatgaccgg tgccatagtag actccattaa aaaatgtaca cgtattttaa aagatcatga 360
athtagaaaa tttcttgaac acataagttt tcttcattaa aagatcatga atttttaaaa 420
atattcatgg aatttacaaa atat 444

<210> 11221
<211> 339
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-044-Q1-E1-E3

<400> 11221
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ttgttagcct caccagatag atgatactaa ctaaattacc ttgtccatta tggcttgagt 180
ttttgttggt ctcttgggtg tctagctcta gtggctcctt ggacagtata tcgatcctgg 240
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gttgtaaagc tggggatgtg caaccagctt caccttcag 339

<210> 11222
<211> 236
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-044-Q1-E1-F1

<400> 11222
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tacgctgtaa cactcgcgt ggggcacgtg gaaatccgta tctctaacga catgacaact 180
tgtttcgggg tttttaccag ggtagacatt tggggctctag caccatcagg gaaacg 236

<210> 11223

<211> 380
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-044-Q1-E1-F3

<400> 11223

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 ggtttgattc ggtttggttc atacggtttt tggtttatac ggtttttata ctttggttta 180
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 ttccgtaata accaaattaa ccaaagttga cgcgaatatt tgaatggaca agaaacattt 300
 ttggtcacat gatttggtat gtgcatgtag ccatgtacct aagatttttc ttgtaagaaa 360
 tgectacgga tattagatca 380

<210> 11224
 <211> 382
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-F5

<400> 11224

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 gtgacagagg tagggaccaa aagagacaag ccacttttg atgatacaac caacagaatt 180
 aataagttac tattcaagat tagatctata cgtatgtgtg gctctttggc tctaaacatg 240
 tgtggagttg cttgtggtag gctagatttg tgttatgaga tcggtttttg tggcccttg 300
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 ggtgatgcgt ttgatctgat gg 382

<210> 11225
 <211> 426
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-G10

<400> 11225

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gcagccagtc aagaggccgt aagcgtgaga ggtcactgag cagagctgat ggtgatgatg 120

ctatggaagt tgatggccag cactctgaca agaagctgcg tatgaggtcg aggtctaggt 180

ccaaatcacg accaattgaa gaggttgtac caggtgacgg gatccgggat gttgctcaaa 240

agaagaaggc catcaagaaa tcgagggact ctgtcaagaa caggaacaag gatgctcgcc 300

gtggagaggc ggatcgcgtc atccccacct tgaaaccgaa gcattctcttc tctggaaaac 360

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cacgcg 426

<210> 11226

<211> 357

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-G11

<400> 11226

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tgccgcgtca aggtccactt ggcggacggc caagtccaac cgttcttcac catggacaac 120

ctcgaccaac tcagtggcat ccaactcgcg atgatgtcc catgctgcac tgccgtcaat 180

gtcaaggagg aggaggccga tcgaggagcc ctgatttctt gtaactgogt tggattttcc 240

ccgaaaagga gaggatgaag cagcacaacg acggtaagta tttccctcag ttatgaaacc 300

acggttatca atccagtacg tgaaccaagc aacactatgc tagcggtaac ggcacac 357

<210> 11227

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-G4

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cacctccact aataatgact cctgatgaag ttgaagaaat tgtgagcaaa tatggcgggg 180
 ccctaaaggc cacagaggaa agaattgagg agctcaaata agccaagaag tgagcaatgc 240
 caatttgctg aaagcctcta gtgatgatgg tgacgacaat gtacagagtg acttgaacaa 300
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 <213> Triticum aestivum
 <223> Clone ID: LIB31-044-Q1-E1-H1
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 aattctgtta atgggaatcg gtgtacatca agaactgctt tgtgcaatgt ggcctaagct 180
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 <223> Clone ID: LIB31-044-Q1-E1-H10
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 acattcagag aagttgcttt cttgcttttg tgatattttg gctacacagg tacttagtgc 180
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 tgggtaaaat gactattagt aaattggcac taaaaatgaa tacagaataa gtagaaagac 300
 atgatgacct catctcacgg gttccatctc aatatagctc aagcttttta gaaactacat 360

ttgacacaaa gactaaatt gatatagttg tgatagcttc cgaagtaagt gtatcacttt 420
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<210> 11230
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 tgtggtgtta tgcacacgag catagctctc ggatataaat gaatgagatg ctccgtgtat 180
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 cttcttgatc ctcttcgca gaaacataat taacatggcc acgaacactg gtggacggtt 300
 tgggtgtagaa cactttccct gtcggatttc cgcaccaac agtttttgct gcctgggttg 360
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<210> 11231
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 <212> DNA
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 <223> Clone ID: LIB31-044-Q1-E1-H6
 <400> 11231

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 tttgatcgat ttccagttaa gcctctacc tagctgtagc tgctaaaacg gatcggacga 180
 cgcaattcct gctatgttct ccagtgtgtt tccagacctc ttgtgtttta tgtgaacttg 240
 tgtcctccct ggtgtatcct gattgctgtt gcgcccgttt gtagtatatt ttttcatcaa 300
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<210> 11232
 <211> 396
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-044-Q1-E1-H8

 <400> 11232

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 actttggggg tcttgcggtc aaccctcttg tagatattga aaagcatgaa atggacatta 180
 gattacgtat tgggtacata ttcacggttt tctctaccag aatatattgc ttctctattg 240
 tttggccaag taatctagat tcaccttata ttcttgaagg tattagtcta tcagattatt 300
 aatctatatt tcattttcca agaaatcaaa ggacgagtca aacattgtac gagcttcgac 360
 tagcagaacc tgccctcgag gtggtggcca acagtg 396

<210> 11233
 <211> 350
 <212> DNA
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 <223> Clone ID: LIB31-045-Q1-E1-A11

 <400> 11233

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 cacctgctgg gcctgcgcaa agttcttctt ctccatggc atcaacgggg cacacaagtg 180
 atattatttg ttgtcattgt aagggaagag gtcattatgc gagagaatgc aaatcttagt 240
 gtgtgatgat tgctactaaa gatggtcggg atgagtccac tagtgactat gatgagcaga 300
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<210> 11234
 <211> 400
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-045-Q1-E1-A8

 <400> 11234

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gtttatttgg caacattgta ttgagttcat tctgtccggc ggtgctcatt gtttccacac 180
ccaactacga atacaaccct atcctccaga ggtcagcttt gccaaacaag gaagagaaac 240
gggaacaaga cgctgggtct tgcaagttcc gcaaccatga ccacaagttt gaatggacga 300
ggtcccagtt ccagcactgg gctactggcc tcgctgcaag ccacaactac agtgtggagt 360
tcagtggcgt tggcggctcg agcgacgaac ctggctatgc 400

<210> 11235
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-B11

<400> 11235

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aattgaaata cttgtagatg gttccactga ccacctggtt tctggtggtg atattagtat 180
ggaagagagc acaggagctc caactgcttg gcgtacaggc aggaggacag ccatgcaaag 240
aattccccgt tctaattcctt taggagcatc aatggactgt ggcaatgaag gcaggcttgc 300
atatccagac tgggaaatga aaccagtctt cagtaaatac tcaacttctg caaatcacca 360
ggttaagaaa agcatgtcaa atagcaagca gaggtcatcg gcatccaaat ctcaaaaga 419

<210> 11236
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-045-Q1-E1-B3

<400> 11236

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tgacattgcc gatgccgttg ccttgcttcg tcttgatgac ctgtatgtgg actcctttga 180

gatcaaggat gtgaagacac tcagagggga gcatctgtca cgtgccattg ggcgcctgtc 240
 agggaaagga ggcaagacca agtatgccat cgagaactct acgaggactc gcatagttat 300
 tgctgatacg aagatccaca tactcggatc ctttggttaac atcaaagttg ccagagattc 360
 actctgtaat cgtatcttag gttccctgc cggcaaggtc t 401

<210> 11237
 <211> 459
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-045-Q1-E1-C1
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 attgagtctg ttcttcatac ctatagtcca cgaaaaagcc aaaaaattaa ggttagttca 180
 tcttatccga accaatctga gcctttgcat aatctttttg gtatttgctt tgttgaattt 240
 ggggttgcat catcgtgtca agttgctggg cctagagtct agtccttttag agtttcgagt 300
 tcttctcaca agttgtcagc tcgccgcgc accatcgtca tcaccgctgc catataccac 360
 caccatcatc accgctgccata tataccagca tcgtaatcac cgctgccata taccaccatc 420
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<210> 11238
 <211> 224
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-045-Q1-E1-E4
 <400> 11238

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 tttcaatcat gcatcttacc atcatgtta aagatcatgc ttgaagtgtc ccccgctcggg 180
 agaaggatcc aataactttg tggtagctgg attctaactg ccca 224

<210> 11239
 <211> 370
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-045-Q1-E1-F10

 <400> 11239

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 agccagtatg ggacaggccg acgttggtcc tggagatgat ccagatgac ggggtgcatgg 120
 acaaggacga gagacgggaa gaggaccaga atgggtggctg ctgcgggttc ggcaaaggca 180
 acttctccga gctgttcaag tccattgaac attacgagaa gtcccttgaa gccaaagcaat 240
 ctgctgcagt tcagggatca tacgatagaa gctggagctg gatgagctga tccagtactt 300
 tgtatcaggt ctcatggagc aaaagaaaat gatgttgttt gtaagatgcg gtgcgcaatt 360
 atgtccgatg 370

<210> 11240
 <211> 343
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-045-Q1-E1-H2

 <400> 11240

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 tctacttcag gtcaccgtt atgcaagaag ctatatatag acaaacttat atcatatacc 180
 caacatagga agtcaaaaata agtgtatgat aagatttaga taaaacagtg tgtataataa 240
 gatgagtaat agacatcaga tgtgtagaag tgataatatt gtgaagaaat tttgtcagac 300
 tttgttttgg cagcattgct gtgaatacag ctcatacgtg gca 343

<210> 11241
 <211> 482
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-045-Q1-E1-H6

 <400> 11241

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 ccggatgacg acgagttcag gtcgcagtag ctgcaggact acatcgaggc gaccctcgaa 180
 tccagcagga acgggtccaa tgtgcagggc tacttcgtgt ggtcattcct ggacatgttc 240
 gagtatatat tcggctatcg catggggttt ggcctctatg gtgtggactt caactctgag 300
 gagaggacga ggtaccagag gcactccgcc aagtgggttca ccggcttcct ccatggcggc 360
 gagctcaggc cgggtggctct gcccggaag gtctaataccc agtgatcttg tcacacgtcg 420
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<210> 11242
 <211> 407
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-046-Q1-E1-A3
 <400> 11242

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 gcatctccat gggccatcaa acagaggatg ttatcgggtt ttgtgttgac ttcattcctg 180
 gccttaacaa gataggcttc cctaaatcgc ggtatgatgg gatactgact ggaaaggcac 240
 tcttgaaga gactcaataa tatgcaggga cggatattct tggctctcaag cactactac 300
 agttctacag aactctacct tggtgacccc gtatgtcgat gaacacaaga acagtctgcg 360
 ctccaaacac ccggagcagt tcgacgactg gattacatgt gaacaca 407

<210> 11243
 <211> 406
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-046-Q1-E1-A4
 <400> 11243

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aagcgtcttt cgctgatcga catcaagatt gacatcaagc gtatccctaa gaaggcaact 120
 ttgatcaagg ccatggagga agcagatgtg aaaaccaa at gggagaacag ctcatgggg 180
 aagaagcttg ttgtccagaa gagaagagca tcgccgaatg actttgacag gttcaaggctc 240
 atgttggcta agattaagac ggggtggtgct atcaggcaag agcttgccaa gctcaatgag 300
 gttgctgctt agaataatcct agtggatggc atgttgagtt ttttgggtcca agttggatct 360
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<210> 11244
 <211> 339
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-B1

<400> 11244

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 aactccgcct tttctgagat ggggttgcaag ctgggtttccc acgtgagctg gaatatcatg 300
 gcgtgtgtgt cctcaatctt gggaaggatg gactccgac 339

<210> 11245
 <211> 384
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-B5

<400> 11245

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 aggaagtgca cacgacctct tgggccta at ctatccatgc tactctagct atgatgtacc 180
 agactaccag gtcgatggat gtctcctaga tcaaccataa gcctggtagc tatgttgctg 240
 cagcgccgcc agagccgctg ctgccatcag cggagactcc cctgcatggc ggatctccta 300

tctgcaccaa ccacctctcc cgtggactcc tctcaagtct caacatggaa gtggatggtg 360
gaacgtgacg tctcctcac tggc 384

<210> 11246
<211> 395
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-C2

<400> 11246

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gcctgtgcct cccagagga tgccgccatt cttgtgaaga aagaccattt ctcccatcac 180
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cactggcgtg tgctggtgt ttttagggtt ctcttgccag cggacctgga tttcgttcaa 300
atggctgtgg tgacttatga gatcggaat gttgctgtgg tcggaactgt gtgtaaacgg 360
tttgccgaaa ctgctgccgt tggacatgat tgtga 395

<210> 11247
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-D2

<400> 11247

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aagaatgaag ggcatacac tatcatcctg gctggtgctg agtatggcag tggaagctca 240
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gctggggagg atgccgacag tcttggtta actggccatg agcgttacac catccagctt 420
ccgactgatg tgaatgaaat caagcctggc caagatgtta cagt 464

<210> 11248
 <211> 430
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-D4

<400> 11248

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 atatgtcgag ataacgctat cgagatttat ttacgttcat cgtgcgctga tgggtggtggt 360
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 taaaaagaag 430

<210> 11249
 <211> 395
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-E1

<400> 11249

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 agcgaaaaag tggctcggcc aaaaaaaaag gggcg 395

<210> 11250
 <211> 398

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-046-Q1-E1-E2

 <400> 11250

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 gcactggtac gtcggcgagg gcatggagga aggtgagttc tcagaagccc gtgaggactt 240
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<210> 11251
 <211> 374
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-046-Q1-E1-E4

 <400> 11251

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 atgagttctc ctccgatgcg tgggtggggag atgggggtct atgctgggaa gggagattgg 180
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<210> 11252
 <211> 348
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-046-Q1-E1-G4

 <400> 11252

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gtggactctg cactcctgga tgttaaccgt gaccaggcgc tgctatgcat cactgtcgca 180
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<210> 11253
<211> 382
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-046-Q1-E1-H3

<400> 11253

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caactcgcat ggctgatcc gcaagtacgg gctgatgtgc tgcaggcagt gcttccgcag 180
caacgccaag gacattggct tcatcaagta ccgttaagaa tggaaacctc aaaggaagca 240
aggactacga aattatcaac gaactgtggt gcttcacga ggctgatctt tctctataa 300
gctatgtaat ggactactat tatgtctgaa tcctggtgac aaaaccgtga aaccatgtta 360
gccactgctg tttgagcatg tg 382

<210> 11254
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-A5

<400> 11254

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aagctgcgga ataaacggag actagctaaa ggtgagatga cgatgtgtgt tggaagtgtt 180
tccaagggtg atgtgatcaa gcacgcacgt ctcctctac catcgagatt tgtgtttgcg 240

ttgagcatga ttggattatg tttatcgcaa tacggttatt catttaagga gaataatggg 300
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agtgatacac atgttcgtac caaaaaaaaaa gggaagagag aaaaaaaaaa gcgggcgctc 420
taaa 424

<210> 11255
<211> 324
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-A9

<400> 11255

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ccatgctcag atcattcatt gacaccacaa cgcatacgac gaagcaccaa caaacatgac 180
gatttatgac tttcaccag gcacagattc tacattaata cttgcggcac ctcaataatg 240
aacatttatg atgcagtaga tgacacagtg atcaataaaa acaattagtt gaaggtaaag 300
atgaatgttc tggacttgg attc 324

<210> 11256
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-B1

<400> 11256

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tttccatcta gtatgattat ggtggcaaca tttttggtat cgggttggaa ggtagaagct 180
gtgcgatcgt atctcagtga cgcttttagac tattgaagag tctgcacaaa cacctgaaca 240
cctattttgt ttctgaaaa ctgaaaagac atgtaaaagc gttgttggtt tccctctttt 300
gcgaaaagtg tgggtgaaac ttggattaac ttagctcttt ccatgtgtgc agttcaggta 360
actgcaggag tgccttggtt aaacctgggt atg 393

<210> 11257
 <211> 268
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-B4

<400> 11257

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 ctgtttgttca cccatccatc gaatcatatt gcgtaggaaa aattagctag tattgactat 120
 catgattccg tcaactgtgat tgatatcgac tacttctcga tacctgggtgg gtaatgatgg 180
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 atgcatgtga tatattcggg gttttcac 268

<210> 11258
 <211> 418
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-D2

<400> 11258

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 tgctaacctt cttaatgcaa acttgtttac ttatgtctat actcagatat tgttgcttcc 180
 gctgactcgt ttatgatcga gcacttgat tctagccctc gaagcccctg gcttgattata 240
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 cctgatcttg atcgtagacg tttgcgtgca tgattagtgt acgattgaat cgggggagtc 360
 acaccctagg agcatgcgta gtagtacttt tcttcgaggg caagtagact tttgcaat 418

<210> 11259
 <211> 389
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-E2

<400> 11259

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 ccgctcatgc gaggagcccg acgccgccag gccgtctcaa aaagaaacag gtgccgccac 180
 ccgcctcacc caaatcggtg cggaacaaaa tgatcgcaac ccagctagt aaagcatact 240
 atcgatcgac acgtgcggtg ggaagtattg caatgggcca catgtacatt cgagtagatc 300
 gacacgcccga gacatgacga gcaacacggt tgcagggaag atttagcctg caggtcacaa 360
 cccactatc aatctaggag cccccctct 389

<210> 11260
 <211> 349
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-E6

<400> 11260

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 cgggtggctca acggctgggc gtctacagcg ccatatacta cgcggaacatc ctgcactttc 180
 tgggtgcagac gtggaacgtc gccaacctca ctgggctgtc tggggaatgg aggcggactc 240
 aggatttcct ctggccactg ggaacaaggt tcagggccct ggtggagcca actcagggtg 300
 gggcgacaca gttaccggtt gttcctttca actggattca tggtcggca 349

<210> 11261
 <211> 414
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-F2

<400> 11261

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 gatcttggag gctgccggaa ggggagtcgg agcccgcgcc gcgcgacggc gagccggttc 180
 tctcagcagc tcatgaagaa agacgtttct cgcttcccc acatccattc ttccacgggtt 240

tcgtgaattt cttcgggtgcg cagatccatc acttttcccc aacaccactt tgtaccttgc 300
cacatttggt togatgtgtg agaagttcct gggatgccac ccacattggg gggtattcaa 360
acatatTTTT acctgttgat ctcagtcggt gaacagagcc aatctgacta atga 414

<210> 11262
<211> 113
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
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<400> 11262

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<210> 11263
<211> 436
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-047-Q1-E1-G12
<400> 11263

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caagcctcac tttgaccagc tcttcaagag gaccggcagc ctggacaaga gcttcgaagg 180
cactccaaag gttgtcaagc cagaaaggaa tgttgggaat gagaatgcta ctaaagtctc 240
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tgagacgggt actgtgaata acaccatgta ccacaagagc tgcttcaaata gctgccatgg 360
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tcaccaaacc cagctg 436

<210> 11264
<211> 361
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-G2

<400> 11264

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acctttagta ttctcgggaa tatatctgat tatgaagatg ttccgtaatg ctctggagcc 180
gacaactttt tggactgctc gatgtctaata accaatgata ctacgttttt ggggtgttggc 240
tgtaggctgg agctatcagt atgactgaaa ttttcatttc accagtgtaa atttatacgg 300
acatcaatag acagcgacac gtcaatactt gtcaccagtt tgcaatttgt agtacagtat 360
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<210> 11265

<211> 340

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-H11

<400> 11265

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atggactcaa cattagtcat aaagcactca tatacttatt gcaccaatct attaatacct 180
aagacatagt actacacgca tgctcctatg gggatacttt gctacgacaa tatcatcgct 240
cgtccccgac cgccactcat aatgaatata agcaccatac atctcatgct ccaacatcgt 300
tacataaggc ttcaccatac gtgcatgcta cggcactcac 340

<210> 11266

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-H2

<400> 11266

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tagtgcagtg cacagaccgt tatcgtcagc gtcttgatc atcaacctga cctcgtcgag 180
cgtaaagtgc tcgccggcct cgatggccag ccgctggatg tccatgtccg gcctcgatgg 240
cctcatctgc ccgaaagatg acatggtgag taacccccaa tctgggacac ctcagacgat 300
gacagaagag agaggaggag tcatgagact gtgatagcct ggttttttgc cttctctctt 360
tttttcggac tttcttttgc atctactttg gattttgagt tttgagtc 408

<210> 11267
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-H4

<400> 11267

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acgtcctctt ttgcctcaag accttaaaaa gaaggccctg aatatccaga tagcaagcat 120
tgtgtgttct ggtattcaac ctcttcacaa tctcaccttg gtgagattta tcgaacagaa 180
ggttggaaca ggggagagca tcccggtgggt ccagcaacag attgatatag gtttcacagc 240
tggtgagaac atgatcaaag gctgtgctgg gaagtttgct atgggatatg agatccaact 300
ggcatatgta atccttgcac cccagatttt tgctgcggtg actcggttaac aaacggacat 360
gtcgaactat cccaccctcg cgaggct 387

<210> 11268
<211> 262
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-H6

<400> 11268

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aattcagatg ttcgcgctcc tcttcgtggt gatattctcg aggttactct ttttgtggcg 180
tgtatgatca tctgcactgc agtattgttt aagatcagat tgggtgatgg gtactatttg 240
tatcgcatca gtcggccttt aa 262

<210> 11269
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-A6

<400> 11269

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 caagataagg ataacttctt cgtgccttac tttcccgagt atgtcctccc ctcaaccggc 180
 ccgtaacata tgaattctta catttcgacg gtttttcttt taacattccg tgttttctgc 240
 agtgacacac gttgcacgct catcctecta agccccaat attctatggc caggtatttc 300
 gacccgaacc gtcagtcaaa cgtagactac acaaagtca agaaggttct tgatgatgtt 360
 ctccccggct acgccaatc tggaggcacc ttcaccaggc ctattcgtaa gtacggcaag 420
 cacgtgttct cccacaatac 440

<210> 11270
 <211> 359
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-003-Q1-E1-A7

<400> 11270

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 cctggaaaac tgcattggtg ttgacaagat gaatccatcg tccatttggg ttcattcagt 180
 agaagatgcg atgttccacc attgtgcttg ccatgtctca gtatatgggt ttagtaaaact 240
 ataaactact aaggttgcca tggatgtatt gcgcggttag tagcatgaat ctgtcgtttc 300
 tggacttaac agcttggccg ggatcagatc ntgtgtgtgt gtcatatcaa tcaaaactg 359

<210> 11271
 <211> 457
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-A8

<400> 11271

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taaaccctag tttatgtgtt gcttcgtag gggttgatat ggacccatat gtttaatgct 180
gtggtaggt ttaccttaat actccttttg gtagttgcgg atgcttgcaa tatgggttaa 240
tcataagtgg gatgcttgct caagttaggg cagtaccaa gtgtcgggtcc accacatat 300
caaattatca aagtaccgaa cagaaatctt atgaacgtga tgaaaactag cttgacgata 360
attcccaatg tgtcctcggg agctcctttc tcattattag atttgtccag acttatcctt 420
tgctacataa aggattgggc caccttgctg cacttta 457

<210> 11272

<211> 140

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-B11

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acaagcgtgt gatcgatagg ttcgagaacg aagccgctga aatgaacaag atgtctttca 120
ggtacgcctg ggtgcttgac 140

<210> 11273

<211> 461

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-B8

<400> 11273

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ggtttgggtt caaccttggg tttcttcact agagcagcaa ctgatttgcc gtttcatgaa 180
gtatcccttc ttgcccttta ccttcttgaa actagtgggt tcactaacca tcaacaattg 240

atgctccttc ttgatttcta ctttcgcggt ctcaaaccatc atgaatagct aaaggatcat 300
catatatatc cctaatatgt cattgttcat ctogaagctc tagtagcttg gtgggtggtga 360
ctttggagaa acattactat cccatctgga agattaactc ccacttgatt caagtgattg 420
tagtactcag acaatctgag cacatgctca atgattgagc t 461

<210> 11274
<211> 316
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-C1

<400> 11274

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cctagtagct atatgcaatg cttagcactg aactgctgtg acaatgttat gttaccgtaa 180
catgtgtggg ctatgtctgc ccattgtgtt gtgctactac tgtaaaccaa ttgcgtgggt 240
gcgtagttt gcttggacca ttgcttgtat gcagctacaa gttgctaata aagtacctac 300
tctaacctcc ttttgt 316

<210> 11275
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-C2

<400> 11275

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tatcggtgga ctgaactgca taatgccaga ataagagggg gatagctaata cttgtcgaag 240
actacgcttc tggctacctc catcatgcag catgtagaag agagtagatt gaagtcctcc 300
aagtagcatc gcatagcata atcctaccgg gcgacacctc cctcgctgcc ctgtggaaaa 360
gcgatcaccg agttgtctgt ggaacttgct tgggtgtgtc ttattaagta tccggttcca 420

gttgatcat

428

<210> 11276
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-C3

<400> 11276

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aacttcctcg tgccttactt tcccagtaa gtcctccct caaccgccc gtaacatatg 180
aattcttaga tttcgatcgt ttttcttta acattccgtg ttttctgcag tgacacacat 240
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<210> 11277
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-C4

<400> 11277

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tctggaaaat gccaaagctg tgggttggct tcttaaaatt ggcataccag acccaaccac 180
gctcttttga tgttttacta cagttacctc caccacagct tgaagttgca ttgaataagt 240
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catttgccgc cgctgcatta caaacagcag acacgacttc ctctcttctt ggtgcaaaca 420
taatgtgaaa tctgat 436

<210> 11278
 <211> 348
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-003-Q1-E1-C5

<400> 11278

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ataaactact aaggttgcga tggatgtatt gcgcgggttag tagcatgaat ctgtcgtttc 300
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<210> 11279
 <211> 447
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-C6

<400> 11279

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aaaaaaaaatt agggtttagt catcccatcc gaaccaatct gagccttgca taatcttttc 240
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ccatcgcatc atcatcgctg ctgttgccat ataccaccac cacatattca ccgccaatcc 420
gaatccatat acgccaccac atatccg 447
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<210> 11280
 <211> 230
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-C7

<400> 11280

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gtaaaacgat gtcacatgct tggctagatc aatggccatc catcatctat cataaatcaa 180
ggtatgttaa gccagacttg cacattcttg ggacagatgt atcttttcat 230

<210> 11281

<211> 399

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-D1

<400> 11281

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ggataacatc atgctgtcac ctccactaat aatgactcct gatgaagttg aagaaattgt 180
gagcaaatat ggcggggccc taaaggccac agaggaaaga attgaggagc tcaaatcagc 240
caagaagtga gcaatgccaa tttgctgaaa gcctctagt atgatgggtga cgacaatgta 300
cagagtgact tgaacaaata aataccaata ataacaccgt gagcctgaaa attgatcctg 360
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<210> 11282

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-D11

<400> 11282

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caatgcgcct cttgaagatg gtatggccgg cacatctctt gcagccatgg acgaagctgt 180
ttggttggtc tggagagggc tggttacca ttgctgaagc atgcgatttc atgcattgat 240

tcgacatgtc aagttccac aatataacaa tgacctgtac atatcttttg tagccttatc 300
ccatgtatga catcatgtac atatgtgcga aaatttgatc cgattccacc atattcgaga 360
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<210> 11283
<211> 432
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-003-Q1-E1-D2
<400> 11283

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gtctcgagag ctccccgtcc gttacctatc tccgtccggg gcaagccacc gacgccatga 360
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gtttgtacct cg 432

<210> 11284
<211> 391
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-003-Q1-E1-D5
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gattgaaagt agatcctcta agaaagagta tgcgcagact ctttcagaat gtcacagttt 240
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tgctaaaaaa gagaccttac cttctttttac aaggctctggg tgtgcctatt tgatggaagc 360
atgccagttt gagcacaagc tttttgctca c 391

<210> 11285
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-D8

<400> 11285

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gaacttgaca tagttggaga tgtgatcgtt gtggatgttg agaggggagt ggctggagga 180
gggagcagcg gaggaggaga gggcagcggg ggtgatggag gatgtagccg gagcagaggg 240
agaggtccca gaggagaggg cggcgaagga aggggagtgc gccgccgggtg agggaggtgg 300
gttgaagaga tcctcgaaag ccatagcagc tgataccaag ttatgggatg aattatgtgt 360
aactcgcag tagctcacag agagattaca tataggaggg agacctcaac ggctccagga 420
agttaggcac gtcctaagcg tgcattggctc tat 453

<210> 11286
<211> 346
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-E1

<400> 11286

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tctgttcact gcgcgttccg tgcagtcacc ctaagtggca acgggaccaa gggcatgaaa 180
ctcgccgacg cggctcctggg gcgcacatggg gctaccaagc tcaccgaccg cgtaatgaaa 240
gcacctgacg tgctgatcac agtagcaacg atatcagaac acgttccactg gcccggtgga 300
caatcatctc ctctaataga cgtgctttgt ttatgctgcc ttcggg 346

<210> 11287

<211> 463
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-003-Q1-E1-E5

 <400> 11287

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 ccaagaagta ccatgctttc ttggcatcag aggccataat caagcagatc cctcgtctcc 180
 ttggccctgg tottaacaag gcaggcaagt tccccactct ggtagtcac caggaatctc 240
 ttgaagccaa ggtcaacgag acaaaagcta ctgtcaagtt ccagctaaag aaggttcttt 300
 gcatgggtgt tgctgtaggc aacttgctga tggacgagaa gcagatccaa caaacatcc 360
 aaatgagcgt caacttcctt gtgtccctcc tgaagaagaa ttggcagaat gtgaggtgcc 420
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<210> 11288
 <211> 457
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-003-Q1-E1-E7

 <400> 11288

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 gccactgac acaatcgaca gaatcaagga acgtgttgag gagaaagagg gtattccacc 180
 tgttcaacag aggtcatct atgctgggaa gcaactcgct gatgacaaaa ctgctaagga 240
 ctacaacatc gaaggtggtt cagtgtcca tcttggtctt gctctgaggg gcggtcagta 300
 gatgcaacct cgacgtggac cgtaaaggcc atttctacca gaacttggtt gcagacctag 360
 atctgtgaat ttgccggttg attgaagtgc catgtaattg acgcatttgt gaagtcagct 420
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<210> 11289
 <211> 453

<212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-003-Q1-E1-E8
 <400> 11289

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 aggcaagcga cctatacgac agctcgtctt ggatccttca gggttttgac aaacaaagca 120
 attgaggcaa atgatgggaa gccattgcc a ttgttcaga aagcttttat tggcttgact 180
 gctggagcga ttggcgcatg tgtgggcagt cctgctgatt tggcactcat taggatgcaa 240
 gctgactcga ccctaccagc agcacagcgg cgtcactaca agaatgcatt ccatgcactc 300
 taccgtatca ccgctgatga aggcgtcctt gcgctttgga aggggtgcagg cccaactgtg 360
 gtgagagcca tgtcactgaa tatgggtatg cttgcgtcct atgatcaaag tgttgagctg 420
 ttcagagaca nattgggtgc cggagaatat cag 453

<210> 11290
 <211> 397
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-003-Q1-E1-F11
 <400> 11290

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 ggcacctccc gcggaagcaa atctttgcct ccacgagaag caaatatgtg tctcttgcag 180
 aaggaaaaaa aactctgaag cacaactgtg cctcttgcgg aagcaaactc gtgcctctta 240
 cagaagctac aaacatatgc ttccatgaaa agtaaatttg tgccttttagc gaaataaaaa 300
 agatgtgttt gtgcctcaag cgaaaggaaa tcggcgccta tcgcggagta aaaaaaagtg 360
 tttttccatg caaaagaatc atttttcgtc caaatg 397

<210> 11291
 <211> 452
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-F4

<400> 11291

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agccggggagc cactccgtgg tggttatcct ccagccaaat cgacccaggg cgcgctcccg 180
cggcgaagcg tgtggcacga ggagcacaat aaaatgggat cggctaggtg tagtcaactg 240
aaaattatat ttccgtgtca cttgtttata tgtgtgaatg atgcgagcc acgaaagaac 300
aaagcctgcc ggacacagct atgctatgcc atgctactct cttgcgattt gctgtaattt 360
tggagggaga aagcgcgagg agagagagct tgtgagagag accgtgttgt gtacgtacat 420
gtcagagaga tttaatgaga gagagggaga ga 452

<210> 11292

<211> 462

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-F5

<400> 11292

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gaggctgaga agattgtcca gatcaagcgt gccgaggggtg aagcagaggc caagtacctg 180
tctggcctcg gtatcgcccc ccagcgccag gccattgtgg atggcctgag ggacagcgtc 240
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atcaccagc acttcgatac tatgaaagag attggcgcgt cctccaagtc ctggcggtg 360
ttcatcccc atggccctgg tgcggtgctg gacatcgcca cgcagatccg tgacggtctt 420
cttcaaagcc agtctgcctc tgacaactag cagtttgctt cg 462

<210> 11293

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-G1

<400> 11293

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gacgagctca tccaaggggt ccccgagaca ctggagttgc tgcgaaaatt gggcaagaaa 120
ttagtTTTTg taacaaacaa ctctaggaag tcgagaaggc agtattcaaa gaaattcaaa 180
acacttgGCC ttgaagttac tgaagaagag atcttcacgt catcatttgc agcagccatg 240
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atcttgGacg agctcaagtt agctggcttt gaaatgtttt ggtggTccgg atgatggcac 360
aaaaaacata atgttgGagg cgaactttca ctttgaccac gacaaaaatg ttggacctgt 420
cgTTgtTggg 430

<210> 11294

<211> 378

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-G10

<400> 11294

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caaggatgag ggtggctgca aacgagaacg tggaggctga gaagattgtc cagatcaagc 120
gtgccgaggg tgaagcagag gccaaagtacc tgtctggcct cggtatcgcc cgccagcgcc 180
aggccattgt ggatggcctg agggacagcg tcctgggctt ctcaagtcaat gtgcctggca 240
ccactgcaaa ggatgtgatg gacatggtgc tgatcaccca gtacttcgat actatgaaag 300
agattggcgc gtctccaag tctcggcggt tgttcatccc ccatggccct ggtgCGgtgc 360
gCGacatcg cagcaga 378

<210> 11295

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-G2

<400> 11295

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agggccggtg ctacgacttc tggctggact tcagctcgtg catgagccgc tgccgccagc 120
 cctccgactg cggcctcctc cgcgaggact acctcgagtg cctccaccac tccaaggagt 180
 tccaacgcag gaacaggatc tacaaggagg agcaacgtca gataagagct gctgctcgca 240
 aggccaatga agaagccgaa ggagctcctg ctgttgcagc tcaccactag catcgctttt 300
 caattttttc ttatgctttt gtttgcgtca agtgcttcca tggtcggcta tgagcaatgc 360
 aataattacc taaacattct accctcccaa ctccatgact tggtctgaga gcatgagttc 420
 gataaactac cttgggcat 439

<210> 11296
 <211> 394
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-G4

<400> 11296

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 ttttagcaaa atcagtttta agaggatttt tagggaaaaa acagtttaag ttgttggttt 180
 gtagagtgtt ttgtttgggc ttaaaaactt caaatatggt actagtttgg gtgagactag 240
 tattgaatgg attttcatct cacaaccgaa tgtccacgag ctctactcg gcctcctggt 300
 tcccagagtc gtgctcggcc tctgttccc gagctcgtag tttggcctcc tgtcctggag 360
 ctcatactcg gcctcctggt ccacgagctc gtac 394

<210> 11297
 <211> 370
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-003-Q1-E1-G7

<400> 11297

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 tatgagacat cctgctggag actgcacctc tgacagatgg atctaagacg aagggtctcc 180

gacacaggca gctgcagatc catggtgttg agctcactgt gactaaaatg attgctacac 240
 tgcctgcggg gttgtaagtg atgtggcatc acatggaatc agttcctgat aggtcctctg 300
 acattggcat catgggagct tgtaccgtaa tgacatttgc cgctgagtca gactctgtct 360
 atagcatgca 370

<210> 11298
 <211> 352
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-003-Q1-E1-G8
 <400> 11298

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 catgtggctt ggttgatgcc tcaggtctta atgttaggtt tgactgccag gtctgtttgg 180
 tattaggcca ggactatcaa catcccttca tcaactggat aggagtatcg acagatactg 240
 cgtagacggg gacttcacac ttaccgccgt attttttttt agaagttttt ttagataatt 300
 aatacagtgg ttgtatgcat cgcccatatg caaaagccgg ggtcttctct tt 352

<210> 11299
 <211> 377
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-003-Q1-E1-G9
 <400> 11299

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 gtagacttca tttgatgggg gcctgtctgt cagcccttgt taaatagtgg tattcacctg 180
 tgtgtgttac cacagtgcgc cctctcactg taatttctcg ctgggtgcttg tgtataaaac 240
 cagtcattat cagtttagat gattgtggcg atggtgaaca caattgctga attaattcaa 300
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 cggccgctct agacgat 377

<210> 11300
 <211> 448
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-003-Q1-E1-H1

 <400> 11300

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 acttcgccc ggtggatacc tgggccaagg aggcggtcga gcctacggac cagcgcgttg 180
 gcatccagcg ggccgtggac aaggcgaacg gcggcaccca tgcgaacggc aggcgtccgg 240
 tgcaagtacg acacagccga cgtctggtgc aagtacaaca ctgagggcct ctgcccactc 300
 ctggcgagga atgggggtac tgacgggacg tgtaccacgc cgcgacggcg tgtcgatagc 360
 aggcaagcgc cgatggatcc gctcttgctg ttccggcgtgc tgtacctctc gctctgcggc 420
 gctccaacgg tctcgccggg cggcgagc 448

<210> 11301
 <211> 230
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-003-Q1-E1-H12

 <400> 11301

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 tatgtcaaga ccaagcgtcg gataccagag gttttcaact attgtgttca accatctaga 120
 gtaagatcat gcttacgttg tggcttgta aatattgtga cttgttaaata aaagcttctg 180
 agtttgccgc agaaaaaaag ctccaatgca ttggaaccgg accagattta 230

<210> 11302
 <211> 444
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-003-Q1-E1-H2

 <400> 11302

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 ttctcccat gcttggctgg ttgtattgca acatgcgggt cgtgcttcgc tccatttgg 300
 ttgattgcat attttcgaaa tgtcgcttaa agacattggg aagtccaaa aatatgttat 360
 ggggcacatt tttggccacc aaatatatgc cgtctagttc ctaaataat atagttgata 420
 attatcatga tacatgtgtt taca 444

<210> 11303
 <211> 451
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-003-Q1-E1-H3
 <400> 11303

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 acggcgagct ggtttccatc ggagggctga acgctgatgt gaacaagaag ctgagcgccg 240
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 tccacgattc aaagcgctca gactttggat ggaatggatc caccttttag acgcatcata 360
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<210> 11304
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-003-Q1-E1-H5
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tgctctaatt tgacagtcaa agtaagtcaa cgcattagaa gacaagcata aggatgacaa 240
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cgaatatcca aatttaatgc tctcaaaa 448

<210> 11305
<211> 334
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-H6

<400> 11305

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tgttcattgt attttagttc tttctagtga gctcttatca gtgcagagaa atgatgctct 240
tataagtgga aaataatgca acattcaggc cctgtttgga aactctggaa tccagcgttt 300
aattaatgcc aaatgtatga tatgcaaaag aaaa 334

<210> 11306
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-003-Q1-E1-H7

<400> 11306

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gtctgccga agtgctacgc caggctgcat ccaagggtg tcaactgccg caagaagaag 180
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<210> 11307
 <211> 289
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-004-Q1-E1-A11
 <400> 11307

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<210> 11308
 <211> 470
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-004-Q1-E1-A12
 <400> 11308

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 aagctttata tgcaacttgg acgaagctcg gctccagcca atggatttca gtgcattccc 180
 tactgtttac cctaaagtcc ctcaacaaga taacgatatt gattgtggca ttttcactat 240
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 cccagatgca aggatccgat atgctgttga tctcatgttc agccactaca acactttgga 360
 tgacgagaag aagcgtgtca aggagttccg cctatagaca tgaaaaagtg ctgacagctc 420
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<210> 11309
 <211> 461
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-004-Q1-E1-B10

 <400> 11309

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tggttgcgat aggggtctgta tagtcgaggc atttgtgatt tgatcgtgca ctctgatgcg 180
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ttgatctgta tgtttacgat tctagtatc taatttatgc tttgtgaatt atgagtcaga 360
ttaattgttg tttgacgact gttegcatta ttgtttttct gaacttgtag tacgttgcac 420
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<210> 11310
 <211> 354
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-004-Q1-E1-B11

 <400> 11310

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cccatttcgg aatatattgg catgcaactt tcgaccaatc cgtttatcaa gacacattca 180
tcactgtcat attgcttacc aggatcatgt acttgacata gtatttgtcg gtcagccatc 240
gtgtacaagt ccttcaggca tgtcactcgt ggatcagtgc ttatcacggg tcagtgcggg 300
atgcattcat aaatagtcac ctttgggtcta ttatccattt gtatccattg agtt 354
  
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<210> 11311
 <211> 222
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-004-Q1-E1-B9

<400> 11311

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cgatccgggt cgaacatgat ttgggattta ggaactactt gaggcccaag tgttgacca 180
aggacccttc ccaatcaaaa ttgagggtga acacacacca tc 222

<210> 11312

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-C11

<400> 11312

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ctcatccgc tagccactac tacatacagc tatgagtgac actataagtg gcccggtata 180
tttaagcaga caccgaagtg ttgaactttg ataaaaattt aggggtatac aaatattcaa 240
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tctgaatact ttaagaagtc aactattttt tgaagaagca atcaagtttg aataatcgaa 360
gacttttaca aagctgaaga atgcgaacac cttttgaaaa tttgtaaact gggaactaat 420
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<210> 11313

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-C12

<400> 11313

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catggtggac aggatctcta gtcatacggg ggacctgcta atagcctacg tagacttgcg 180
cagttgaact ctaaggttgg tcttcaaagg taactcagca atctgaacac gtgctcttgc 240

tttagtcgcg atgatatctc atgcaggtat tgatcatcat cgtagcatct ggatggtcac 300
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 tatgatgagt gatctagtcg ccatggctag agatga 396

<210> 11314
 <211> 445
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-004-Q1-E1-C9
 <400> 11314

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 aagaaaatgg aaaaatgcct cttgagattg cgcagcacca gattatccca gcgacaggcc 180
 accttagatg agtgatcgag catgggcagc atcaaggcac ctttcaagag ctaagagcag 240
 gggttcagct cgcttctgca atgactagcg ttgtcagctc acgactagct ggtttcttgt 300
 gacgtaccac ggatctttct cacaaccggg cgtgcagaaa tcctaacaca gtagaaccat 360
 gaaggcatcg acaattgggt taacaaaatg atcactaaga agtgtttggg ttgtaaaatc 420
 tgtgttcctg ttttgttact ggtgt 445

<210> 11315
 <211> 460
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-004-Q1-E1-F10
 <400> 11315

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 ataaagagga cttgatactt taatgctatg gttgggtttt accttaatga tcttttagtag 180
 ttgcggatgc ttgctagagt tccaatcata agtgcataatg atccaagtag agaaagtttg 240
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tgcctagga caaataactt tctcgtaaca aaaagctctc tactaaaact aattgagttg 360
 tgtctttatc taaacagccc ctacttttta ttacatgct ctttattatc ttgcanacct 420
 atccanaaac acctacataa tacttctagt ttcatacttg 460

<210> 11316
 <211> 67
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-F12

<400> 11316

tatggtgagt cgtattatac acatatagat ggatgcggca gtgtattcgg tcgcagttcg 60
 gtgtaca 67

<210> 11317
 <211> 438
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-004-Q1-E1-H10

<400> 11317

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 tttgatcaag gccatggagg aagcagatgt gaaaaccaa tgggagaaca gctcatgggg 180
 taagaagctt gttgtccaga agagaagagc atcgctgaat gactttgaca ggttcaaggt 240
 catgttggct aacattaaga tgggtggtgc gatcaggcaa gagcttgcca agctcaagaa 300
 ggatgttgct gcttacatta tcttagtgga tggcatgttg agttttttgt tccaagttgg 360
 atctgctcta tgttccagtg ttcttaaagc cagaattagt acaactgttt tcggagaact 420
 acttcatatt ttgtcatg 438

<210> 11318
 <211> 441
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-B12

<400> 11318

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gcaagtgtca cccagggctg tagctccatg gtgttttgtc cggaggggca gttgcatgtg 180
tgccactagg catgcatatg caagtgttcc cctgactgca actctgtgtt gtttttgttg 240
gggggggctag gttagttgca tgtttgtcat taggcacaca actacaaatg tggccccata 300
ttgcaactgg atgtgtacaa tgtgattgca actcaacggg atttggatat ggaggagaag 360
ttgcatgtct accaccagac aaacaactgc aacttttata cccccctttc tcgactacaa 420
ctgtatgcca tcaatatgac t 441

<210> 11319

<211> 330

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-C11

<400> 11319

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cgtaaagtga cgcattgaca gacgtgcttc tgatctattc ccggtgagaa acacacgcga 120
gacacacaac acacgccatg cagaagaagt tggcgaggac gatgcctgga acgaagcacg 180
ggacatggag atcgttggcg gactgggagg cgagctggag cacggacagg agacgggtgga 240
gctcgtacgg ggcgggaggg actacatggc cgcggcttgc aggtgagcac gtggcagtca 300
ttaatttgat ctaggtcagc actcccagcc 330

<210> 11320

<211> 397

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-E10

<400> 11320

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acggtatgga cgagatgcag gagaagaaca ggaaccattg cccacagggc gctggactgc 120

cacctcatca tatgatatat acatggtgga ccccccaaa gaaagcaatg gcaataaggc 180
aacggaggat aatcccctcg agaagcaatc taagcaccga cgtcatcagc gccatagcaa 240
aagtagcgat accggcacaa gagacaataa cactacggat agtgccgaag acaaagacaa 300
tgccctccag ccagccttcg agcaggagga tgggcaagct agccctaaga aacaggcgac 360
agatggagaa tcagaagatg acagtcacat atccctc 397

<210> 11321
<211> 401
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-005-Q1-E1-E12
<400> 11321

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gaagctttcc gcaagatgtc atggcgcttc tccatgcac cggggcatcc gctggtttcc 180
agggtgcccg tcaaccgtcc tccaccagt agtgaatttt gaagtccatc ttgagcttga 240
cgtcatgggg ttgtcatcat cttgactctc acatttcctt tatgaatcac tcaaccaacc 300
ccgtctacga gcatagcaaa gtagactaca tcgtcccggg cattgggtac aaggagagaa 360
gggtcatcct accccatgaa actacttagg aacattactt a 401

<210> 11322
<211> 370
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-005-Q1-E1-E9
<400> 11322

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catctccgcg ttcacggtgt tccatgagac gttcatggca gagtaccgtg actaaactgg 180
tgtaacatgt gtgggattac atgcgagcct cgtggatttt ccctaggcgt ttttgcccc 240
gttgacagca gtatcatgta gacgagacaa aataaagcaa atccatggct tgtgtgtgtg 300

atatactata tcagattctg aaacagatta ccagtcagca cagaggtggc cgggcgaggt 360
gcgggtgggg 370

<210> 11323
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-005-Q1-E1-F9

<400> 11323

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gaagagcaca acgagcccgt tcaagaacaa tcacacggag gatggcggat ccgtgttctt 120
cggagaggac acgaacaacg ggagccagca gttggagggg acggagaccg agaccgagga 180
ctacaccaag ttcacggtgc tgaagctgaa gcaggagctg accaagcagg ggttcggcgc 240
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cgtegttggc ggcgcttgac tgcctcttcc tcaacaatat gtaacacatc attttaactc 360
gtgtgcta at tctagatttc gtgcagcgtt gtgtgctggt gacacgtttt aggtcagatt 420
gtgaaacagc atat 434

<210> 11324
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-A5

<400> 11324

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ccacttggcc acaaggcctt gcgagcattt ctccaggttt atcaacaact ccaactacag 120
tttcattata gtggacacca ccaacgatct aaaagcgctc aagggtttcgg gcttgaaatg 180
cccgaatctt gtcaacatcc agcactacta caaggtctag gggagagaca acaacaaact 240
gaactccttg gttgacctca cctcggccat cgccgacccc tactatacga agatgaagta 300
agagagcaag aagtacaaga acgcctagca cagtgtttgg catgagagac tcgatgaaga 360
acacgtcaag tacatggcca aggatgcgta cacaagctac gagatgtaca ggcggattgt 420

tgacatgagg aactgtct

438

<210> 11325
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-A6

<400> 11325

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tggctgcttc tagcggacac cgcgtcaaac gaagtttggg tatcccagaa aatcagcttc 180
atggacgagg ctaccgccat aactgcagcg tcaaaageta tacaagatac ccaggaagca 240
ttgggagcaa gcccaaagga aataggaatt gcagttaggg aggcgggttga cagagtgaag 300
aaaggcagta ggctggatgat gggcaagtcc caagccccat cagaggggcaa ccacaacctg 360
acgtccttct gcttgtgcga cgcattggata ggctgtgaca gc 402

<210> 11326
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-A8

<400> 11326

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agcacaatgc taagttctcc ttatcaatta tccaaacacc gttgtatggg taatgtcatg 120
aaatttctct ccccttacct aaagattttt ctatgttata tcctgtcatg gatattcatgc 180
cctgcttgtc cttgggaagg aatacccccc tgaaatatgt gtttaaacac attttccttt 240
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ttgaggctta tatgatctaa gcagtaataa tttgttgctt atgtaaacac cctgggtgtac 360
aacottgtcc gtaagacaat gttactattg ctgggtgacat tttggtaacc accgatggga 420
caaaactttg cct 433

<210> 11327
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-A9

<400> 11327

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ccagatactt tgtgttgtaa gcgggattgt acatgcggtg cctactgtga tgaggcactg 120
agatgaggaa ggctgattta ttattcataa atgcatatcc tacctgacca gatctgctgt 180
ccaggtcgta ccaaacggct cctgtttcgt cttcggcgag gatagctata gtgacagatc 240
cgatgacttt gcgtttgcat acattgtccc agtcataaac tgttatgggt acctatccag 300
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ggcatatctt gttttcgtg aaaacgtctc agtttcagc 399

<210> 11328
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-B2

<400> 11328

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caagactgag tgaagataag gttaggcaat gtgttgactc aagacttggg ggggactatc 120
ctcctaaggc tgttgcaaag tttgcagccg tcgctgcatt gtgcgtccaa tacgaagccg 180
acttccggcc aaacatgagc atcgtcgtca aggcgtcca gccctgctg aacgcgcgag 240
cagcccaccc cggggctgaa cacgctggac gctaagctgc actccggcct tttgtatgat 300
ataatagata aggaaaaatg agccatcaat tgttgttctt gcggggcatg tggcaggcgg 360
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atatttgatt ctttgtatcg g 441

<210> 11329
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-B4

<400> 11329

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tagtttagat cgagtctgtt cttcatacct acagtccacg aaaaagccac acacaaaaaa 180
ttagggttag ttcatcatat ccgaaccaat ctgagccttt gcataatctt tttagggttt 240
tgctttgttg aatttgcggt tgcacgctcg tgtctagttg ctggtcttag agtctagtct 300
tttagagttt cgagttctgg tcataagttg tcacgcgcgc gccgcacat catcatcgcc 360
cctgccatct accaccagcg cttatccgcc accgcttcga atccgtatcc atataccacc 420
acagctgtca tatacca 437

<210> 11330

<211> 456

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-B5

<400> 11330

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taccaagat ggcacgtaca caaattggcc aaaagaagaa acaaaagtgc cttggccgag 180
tgctacagca aggaacggag actatgaaag ctagctagat gtgatttgga gttgagatta 240
gctagtacta gtcagccggc ggagattttt ggtgtggcgc gtggtggcag actaaacctg 300
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gtcagacaca gataactgtg cgtctggctg ttcgcgtaac gcctgagtgc ggtaatgtgg 420
agagcgatcg taatcaacac ctggcttttt ttttgg 456

<210> 11331

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-B8

<400> 11331

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ggtggctgca tctcttcgtc agtaaaactct cggcttgggt cctgacagtg gaaatgaacg 180
tcccggatgg atttcaattc aaaactaatc agtttcatct ctactgtata cttagaagta 240
ctattaaaaa ggagtcgcg gttgtgatgg tcgtaatggt ttcatcacc cccccgtccc 300
accttgcttt tcttcatcga aacggttggt cacatgaaag agtgtgcatg atggccctat 360
ctagtgggtga gtggactgtc tattgccatt catggatagc ttgattgggt tgtcgt 416

<210> 11332

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-B9

<400> 11332

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aaggctctct cctcctctc ctaagatgca gatcttcgtg aagaccctta ccggcaagac 180
catcaccctt gaggtcgagt cctctgacac catcgacaac gtcaaggcaa agatccagga 240
cagggagggc atccccccgg accagcagcg tctcatcttt gctggcaagc agctcgagga 300
tggccgcacc cttgcggact acaacatcca gaaggagtcg accctccacc tggttctcag 360
gctccgtggt ggtatgcaga tatttgtcaa gaccctcact ggcaaaacca tcaccctcga 420
ggttgagtcc tcagacacca 440

<210> 11333

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-C10

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 tcatttagag ttctgagttc tgttcacatt agtcacgccg ccgctgcacg gttatccctt 360
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<210> 11334

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-C11

<400> 11334

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 aaaactctag atcaatttgt catggatgct catgttgagg aactgatgaa acctgaaaag 180
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 ggctgtggt ggattatccc acaggttagg ccgctgactc gtcagcaggt aatggacttt 300
 gagttagcaa acgacactgt tgtggctgtc atcttgctgc tccttgagaa ccagctctat 360
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<210> 11335

<211> 432

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-C2

<400> 11335

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aattgtcctt aggaatctgg aacaccatca ggcagggact tcaacctgaa aacacaatgg 180
cgagcacaag cgcgactaat tctccaacag ggtatgactt ctaacctttg gccccagaat 240
ggatgcaaac tcgcgggttaa gttgtcgccg gcatttgaag ctgccgcgca agctgtgacc 300
ttggaacttc caccttgagg agaactgtca gaagagatga atgaacgttc aaccggcagc 360
tgttgagtgt gcaattttcc tgttgtttgt ctgatgtgta aaagtaactt aaaaagtgtt 420
agcgttagca tc 432

<210> 11336
<211> 447
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-006-Q1-E1-C3
<400> 11336

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acggatattc ttggtctcaa gcacactaca tagttctaca gaactctacc ttggtgacct 180
cgtatgtcga tgaacacaag aacagcctgc gtcctaaaca cccggagcag tgcgacgact 240
ggattacatg tgaacaaatc aggactttca gcagttgggtt ggaagcacgt atcagaggtg 300
ataacactgt ttgtgatgag ctgtacttgt tgtccagggg accatctttg actgtattga 360
tttggaagg atacgagata aatgggaata cattttacac gattgaccaa gatcaaaaga 420
gcaccaacca aaacagcggg gtccgct 447

<210> 11337
<211> 445
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-006-Q1-E1-C4
<400> 11337

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cggaggcatc atcgagccat cctgcaggc gcttgcccgc aagtacaacc cggagaagat 120
gatctgccgc aaatgctatg cgcgcctgca ccctagggct gtcaactgcc gcaagaagaa 180

gtgtggccac agcaaccagc tgaggcccaa gaagaagatc aagaactaga gtgccactag 240
tcagtttcat gggccggttg aatccatcgc gtgtcggagt ttatgctatt atcgtctcgt 300
ttgtcgttga accttatttt actttgcttt cagcctcgta tcgttgtggt gataattgac 360
agtattggta tatggtagca gacctataat ttgcccgtat ctctctgtt tgttctgcgt 420
tctgtttaat tattgactgg ttggc 445

<210> 11338
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-C5

<400> 11338

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cgagctgcca ggggtgttga gcagctgagc gggcagtcgc cagttttctc caaggcgagg 180
tacactgtca ggtctttcgg cattcggcgt aatgagaaga ttgcctgcta cgtgacaatc 240
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ctgaggagga acttcagtga cactgggtgc ttggggttg gtattcagga gcacattgat 360
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gagcgagctg g 431

<210> 11339
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-C6

<400> 11339

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ccaagataag gacaacttcc tcgtgcctta ctttccaag taagtcctcc cctcaaccgc 180
cccgtaacat atgaattctt agatttcgat cgtttttctt ttaacattcc gtgttttctg 240

cagtgcacaca cattgtacgc tcctcctcct aagccccaaa tattccatgg ccacgtattt 300
cgacccggac cgtcagtcga acgtagacta cacaaatgtc aagaagggtc ttgatgatgt 360
tctccccggc tacgtcaaat ctggaggcac cttcaccagg cctattcgta agtacggcaa 420
gcacgtgttc tcgcacaaca cgacgttctg gtgcgtcaag cagccg 466

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<212> DNA
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<223> Clone ID: LIB31-006-Q1-E1-C8

<400> 11340

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ccaagataag gataacttcc tcgtgcctta ctttcccagag taagtcttcc cccaaccgg 180
cccgtaacat atgaattctt acatttcgat cgtttttctt ttaacatccc gtgttttctg 240
cagtgcacaca cgttgcacgc tcctcctcct aagccccaaa tattccatgg ccacgtattt 300
cgacccggac cgtcagtcga acatagacta cacaaatgtc aagaagggtc ttgatgatgt 360
tctccccagc tacgccaat ctggaggcac cttcaccagg cctattcgta agtacgaaa 420
gcacgtgttc tcccacaata cgacgttctg ctgcgtc 457

<210> 11341
<211> 341
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-D11

<400> 11341

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ggggagcaag ggaggggaag ctccatcagc tgctggtgaa gaagcagagc cataagattg 120
gaggcgatgg catcggtcgt tagaacttat gatggttatg agatctgttt ctagacgcga 180
ggtagaattt tgggtgtccc ctgaagttgg gtagtagagg tgggtgttgg tagcttttgg 240
cccggggcta tctgtagtgt tcaacgttat tctgcacctt ttgtttacga gtaaattgta 300

tgtgctttgc acgtcactta agtatataag agcatgggaa a

341

<210> 11342

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-D4

<400> 11342

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ccaatgaaaa ggtagacttg caactgggat gaaaaacaaa acacatgctc tagttgtgag 120
tagaggggtga gcttgcaact tggacaacta cgagcctagt cttgagtcga gagggacttg 180
cacctgggac aactatgaaa ctacaagtca gttacgagtc aagggtcgaca tccggcaagc 240
ggtcgcagca atgccagta gaagtctgaa cagagcagac ctagagtata tgactagaaa 300
ggaacaagtg gatggggaaa gaagagcgag aaaaagatg gtggccttgac ttgttggtg 360
tgtgcagcaa aaattactag aaaatgatcc agcagaataa ggacaacttc caac 414

<210> 11343

<211> 459

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-D7

<400> 11343

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acaatcaggg cctaattctca ctttcggtct attaaagtcc catgtttttt atgggctcga 180
gatatttaca cctgtaaacg gcctattttt actgagggcc caaattatgt ttaggcctgt 240
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cccatatatt tttagtggct acatgccaat tttggcccggt agtcgttttt agcccaattg 360
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actaagataa acctacacta tacaaaaata gcgtcgtaa 459

<210> 11344
 <211> 316
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-D9

<400> 11344

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 tgttgtcgat gccccagct gcaggtcgag catcgactcg caactaaggg tgcttttgtg 180
 tgtttgtcta gagtccccag ttgcatgtcg atcatcgact cgcgactagg tgtgtgtgtt 240
 tgttgagggg ctccagttgc aagccgacca tcgactcgca actagaggtg tatgtgtttg 300
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<210> 11345
 <211> 423
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-E1

<400> 11345

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 tggccaagtg ttcgtcgatc tgcaagcctg tttaagagct ggattggccg gtccaattca 180
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 cttgcaattt ggaagaggaa gatgatgaaa cgtggttggt atctatcaat atgccttggt 360
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 cta 423

<210> 11346
 <211> 297
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-E10

<400> 11346

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ctccaagtcc ctcttgtcgc tggaaaccgtg aaccgtggta ccgagggtcat tgctgcgggc 180
atgactgtga acgattggac cgccttctgt gggtcataca caacgggtac cgatctgtcc 240
gtcatcgaga gcgtcttcaa gttgagagaa cgccagcccg caacgatcgt cgatgac 297

<210> 11347

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-E12

<400> 11347

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gtataaactg gctagtgatg aatgctcaaa tcctaataaa gtctctacaa gttcccggcc 180
ggatggaaca agagaagcat ggaaatttat atggcaaagt tctgtaccac cgaaggttca 240
gtcttttctg tggagggttag ctacagattc gctagcaaat tggacaaata aagtgaaaag 300
gaacttgga gttctcaggta catgccttgt gtgtggatat gaggaggagg actcgttcca 360
tgtgttttgc acctgtaata atgctgtgtt cctatggaag gccatgggga acgaatggac 420
attg 424

<210> 11348

<211> 434

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-E2

<400> 11348

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agattgtcca gatcaagcgt gccgaggggtg aagcagaggg caagtacctg tctggcctcg 180

gtatcgcccg ccagcgccag gccattgtgg atggcctgag ggacagcgtc ctgggcttct 240
cagtcaatgt gcctggcacc actgcaaagg acgtgatgga catggtgctg atcaccacgt 300
actttgatac tatgaaagag attggcgcggt cctccaagtc ctctgcggtg ttcattcccc 360
atggccctgg tgcggtgctg gacatcgcca cgcagatccg tgacggtctt cttcaaagcc 420
agtctgcctc tgac 434

<210> 11349
<211> 465
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-E5

<400> 11349

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ggctgagaag attgtccaga tcaagcgtgc cgaggggtgaa gcagaggcca agtacctgtc 180
tggcctcgggt atcgcccgcc agcgccaggc cattgtggat ggcctgaggg acagcgtcct 240
gggcttctca gtcaatgtgc ctggcaccac tgcaaaggat gtgatggaca tgggtgctgat 300
caccagtac tttgatacta tgaaagaggt cggcgcgtcc tccaagtcct cggcgggtgtt 360
catcccccat ggccctggcg cgggtgcgca catcgccacg cagatccgcg acgatcttct 420
tcagggccag tctgcctctg' acaactaagc agtttgcctc gcta 465

<210> 11350
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-E7

<400> 11350

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ccggtgatat ggtcgatgat tggttggatg atcagataat tgagcccgag gaacaatgag 180
tggttgctga ggctgtaaac ccgcctccag ttgaatacgc ctggcccaac ggagctggga 240

tctttctcga acacgaagca gccatagcca tcaatgtcac gaacgcccc a tgaattgtac 300
 tgcattgtgt ttgatgtaat ggttttgtca atttggtacg tgcgaatgag catcaaata 360
 ccgccgtcag ctgaacgagt gataaaccac caccattga ccggtatgat tccaggtcct 420
 ggaatcatga agcccagcac at 442

<210> 11351
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-006-Q1-E1-F3
 <400> 11351

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 aacgtgaagc cagtgtccaa gtcctgaag acagatttct agaccaagac cgccctagca 120
 aaagtggcat gatatacaat acatcttaca atatctgtca cagcaccatc aacaacatac 180
 agattgtctt catcttcgtt atcgtcgtga ctcccctgga ttttcgttgt ttgttgtaa 240
 atttatctcc ctccgtagta gtatcgtgcc cccccgcaat aatctgtgcc tagcagagct 300
 gagccgagct gaagtagtag ggctgtgttg ttgtgtcca tccatgtcag tgtacatatg 360
 attagcccggt gtaaagctaa gttttatatg ccgtgtaatg tggtagtgtc gttgggtcag 420
 aggaagttat tgaccgctg ttgttttt 448

<210> 11352
 <211> 456
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-006-Q1-E1-F7
 <400> 11352

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 acggacaatg agaaaaagac cggatgcatg agatgaacac gaatgcaaat gagatgcaca 180
 tgatgacatg atatgaaatg catgacatga acaaaatgca aaatgaaaga caaaaaccca 240
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ggaaagttac atccggggtg ttaccacact ccaccactac aagaggattt cgtccccgaga 360
tctaggactg aaagaactcc ggatatttat aacagatctg atcctcgtgt tcctagggtg 420
cttctcggtc gaaatgggtg gaccacttca cgttca 456

<210> 11353
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-F8

<400> 11353

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tctctaaagg aagaaggaga aacagaggaa gggaaagggg gccggcgccg agagggaaac 180
cctaggggcg cgggttgctg gatttatagg agggccagga agcatcgagg ggtcgcggtg 240
aaaccacggg ggccatgtgt gggcaccct agaggtttta ctgtgagaga aaagagatca 300
ggaggaggaa gaaaaaacag gggaaggaga ggctgcaggg ggggcctgga cgggtgtcca 360
atgtggattc accacgggag agagcgaggg gggctgcgct gaggctcctg ctggactggc 420
ctggt 425

<210> 11354
<211> 344
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-G3

<400> 11354

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cttaccggca tcggagacga ggacggcgta tggggagcca tggcacagac aatgtcgaac 180
aaacggtggc caacagcaag gggagcacca gatccgccgc aaacaccgcc gcctcttccg 240
ccgccgccgc ctctacgttg atctaaaatc gcagcccggg ccggtggtaa aggagtaaga 300
aaaaaagggg gtactggtaa tggtagacca attgaaaaag gggt 344

<210> 11355
 <211> 460
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-006-Q1-E1-G6

 <400> 11355

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 gacctgaagc agagatatga agacatcaac attatggatt gaccgcttcg agaagagcaa 180
 ccaagattca gaacgctcgt tagaatttcg taaccaaatac ctttccccct cacttcccct 240
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 gctacagtaa tcccgcgtta acgatgccac gtcacctcgg ttactgttgc taatctcgcg 360
 ttagttcgaa accgattcaa attcaaattc aaaatcaagc aaacaataaa agttttcaaa 420
 tattagaact aaaatgtatg gagtgaacca aataatgttt 460

<210> 11356
 <211> 437
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-006-Q1-E1-G8

 <400> 11356

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 gccccctcct ccatctggga cccttgacga ggaagggatt cttagtaccg cgggagctat 180
 aatatgatga tactacaaac ctgtatcatg gaaccctttt gtttacctgt ttgttatggc 240
 ttacctcagt tgtgcatagc tgtacaatag atgcttagtt gtaaagtaac tagatgtgat 300
 ggtaggagta tgtacctgct atataagggg gtctagctat tatcatcaga tccagagtct 360
 tgattaattg tttcgcgtgt acaaggcgat gtttggaccc gacgactgaa tagattagta 420
 aaataagtct gctgaca 437

<210> 11357
 <211> 363
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-006-Q1-E1-H11

 <400> 11357

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 gggggaccac ttctccttcc gatggtgcgg catctttttg atccggacgg atgtcaatgt 180
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 caacaggttt tgtgctgctg gtcgagtgcg agctgctttg gcggacgacg acctcgatgg 300
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 agg 363

<210> 11358
 <211> 388
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-006-Q1-E1-H2

 <400> 11358

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 gggcttacgc accccacctg attcttttca tggcaacaaa ttacgtagcg attgccgggt 180
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 agtatactgc tgggtgctaa gttaaaacca ggtagcagct tgggtacttaa ttcagaatct 360
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<210> 11359
 <211> 444
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations

<223> Clone ID: LIB31-006-Q1-E1-H4

<400> 11359

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gctttagta actagtacta gtaagcaatg catagcagac ctttaagttta tattatcggt 360
gcttggattt aaatcctgga actggaaggt tgcattttgc gtgatgcctg agctctttct 420
cccattcacc ttgatgaaga actg 444

<210> 11360

<211> 434

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-006-Q1-E1-H6

<400> 11360

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ggccgactcc agcatatcgc tgctcgcttc atcggagaag cccaacgtcc tatattcgga 240
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acaccatgag ttgtacaagc agattggtat tgatcctcca agaggggtgc ttctctatgg 360
tcctccaggc actggcaaga ccatgcttgc taaagctgtg gcacatcaca ctactgctgc 420
ttttatcaga gtgg 434

<210> 11361

<211> 415

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-009-Q1-E1-A4

<400> 11361

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aaagcgatag tcaatttggt cttgctgacg tggatatctt tctgcttgng ccaagaagga 360
aaataatcct cacggagaag gttgttggtg aatgctgtag ctttangaca tctgt 415

<210> 11362

<211> 440

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-009-Q1-E1-A5

<400> 11362

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acacaaaaat cactaagggg cactagatgc acttacaaga ataatttgag gtgtcttttc 180
cccgcagcaa cgggcgcacc gtccttatcg ttctttaccc gcgagtctcc cgcgccgtgt 240
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atgatgctct ccaaggcttc agcattagag gtggccacat gcagatcaag aaacagagga 360
acaagaagat gggtttcgca cataaaacta acttctcctg catccatgtc ccaaaaccaa 420
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<210> 11363

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-A7

<400> 11363

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tacagttttt cgcagttaat atcgagtctg ttcttcatac ctacaggcca cgacgaagcc 180
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ttagagtoga ctcgtttaga gtttcgactt ctggtcataa gttgtcacgc cgccgccgca 360
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<210> 11364
<211> 452
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-B1

<400> 11364

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tggcaaacca agataaggat aacttctcgc tgccttactt tcccagtaa gtcctccct 180
caaccggccc gtgacatatg acttcttaca ttctgatcgt ttttctttta acattccgtg 240
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cgtatttcga cccggaccgt cagtcgaaca tagactacac aaatgtcaag aaggttcttg 360
atgatgttct ccccggtac gccaaatctg gaggcacctt caccaggcct attcgtaagt 420
acgacaagca cgtgttctcc cacaatacga cg 452

<210> 11365
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-B10

<400> 11365

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 accatgtgcc tgccatggga acaggagctt tgaacagttc ttacagtcac catatggcag 240
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<210> 11366
 <211> 402
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-009-Q1-E1-B2
 <400> 11366

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 ggcccattgg gaaggccctc tcgtcatcag caaggcccta ggcaacgatt cctaatacct 240
 gatcgacgca cagaagccga aggcacgcaa gagggatgat tctggcaagg agtcggaacg 300
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<210> 11367
 <211> 402
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-009-Q1-E1-B3
 <400> 11367

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 tgttgccggag atttgtgaaa aatgagccct tgtacaccga gatagcagac ggagtgtatg 180

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gcacgtgcga gctgccaaaga agctcaacta tatccgagaa ttcataatttg tgtgtcgcta 300
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gaaagcggtc acagaacaga cctgtgtatg ttcactgtgc ct 402

<210> 11368
<211> 380
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-009-Q1-E1-C11
<400> 11368

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accagccaaa catccaggca gtcagaagca taatcattta gatgcttttg gcatctgcc 180
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agtcaattgc ttttgccggc taagtgtatc gatcgggtgtg tgtttttgtg tgatctccca 300
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tactactact actattta 380

<210> 11369
<211> 372
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-009-Q1-E1-C3
<400> 11369

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gttagttcat catatccgaa gcaatctgag ccgttgcata atcatttttag ggtttttgca 240
ttgttgaatt tgccgttgca gcctcgtgtc aagttgctgg tcttagtgtc tagtcattta 300
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372

<210> 11370

<211> 421

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-D2

<400> 11370

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atcgagcaga aggaagagag ccgtggcaat gaggaccgtg tcacactcat caaggactac 180
cgtggaaaga ttgaggttga gctcactaag atctgtgatg gtatcctcaa gcttcttgat 240
tcccaccttg tcccctcatc cactgctcca gagtccaagg tcttctacct aaagatgaag 300
gggtattact acaggtacct tgcggagttc aagagtggaa ctgagaggaa ggatgctgct 360
gagaacacca tgggtggcata caaagctgct caggagattg cactgaaaga gctgccccga 420
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<210> 11371

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-D8

<400> 11371

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cgaaagccgt atatgtggac tgaatctttg caggatgctt ggagacaagt ttctcaaaga 180
gcaagatcca aggttcagta aggaaccata tgtgagccca gtagttcaga tctcgaaatc 240
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ggcagcacag cttgtcctcg attataagga gaggaacatg ggccaagaaa tctcagcgga 360
cggagtagca gaccatgtgc ttagtgaagc caggaatctg cggacgaatg acaacacatc 420
cgtgat 426

<210> 11372
 <211> 225
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-E1

<400> 11372

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 tcaatgttgc atgtcactgg tgtgttttca cgctgccgca atgctatgaa aacgcgatgc 180
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<210> 11373
 <211> 429
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-E3

<400> 11373

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 tggatctgtg gaaaataaat ggtctggact tcgattatat tgaggaagac aggttaaaga 180
 tatacgagtt gcttactggg aacatacaag gcgctttact tgattcacca atcgactgga 240
 aaaggtagct tgggttaatac atgtggatc agttgtcacc agatacatca cttgatatta 300
 tcattcggtg ttatcaccaa ctacttgggt agggcaaagt tccaaatcct gttcctgtat 360
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<210> 11374
 <211> 224
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-E6

<400> 11374

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tcggcattga gtctttaaat cactattgag aacctgacac cagatcgac tattgcattc 180
acacgatgag aagacctacg ttgtttcaag aagatgggca gatt 224

<210> 11375
<211> 389
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-009-Q1-E1-E8
<400> 11375

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ccaagtactt ctgtgagttc tgtgggaagt ttgctgtgaa gaggaagca gttggaattt 180
ggggatgcaa ggactgtggg aaggtgaacg ctggcggtgt ttacactatg aacactgcca 240
gtgcggtcac tgtcaggagc actatccgtc gtttgaggga gcagactgaa gcataagttg 300
ctactaatgt tttgtcctag tgaatcatct gggatttcgc agtttagacg ataccttgga 360
ttcagttcca ttggctgttt agtcaagga 389

<210> 11376
<211> 445
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-009-Q1-E1-E9
<400> 11376

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ttggcgcttc catatggtgg agatgacata tccagatgcc tactttgggt tcaacaacgt 180
catcgacat gccaaactt taaaaccgat cccatgaaga agcctataga tatgctaattg 240
ctcaacaaga taaaagaggg gtatagccag ataaggagcg gaagttatga tgctgtttct 300
gttgttcatt catatgagca tgaaaagtct gttgggcac agaagacaag gctgtcagct 360

ctcagtggtc ctccatggg gcttctttat ccccggttc tcattccaga agagtccct 420
ccacctcccc gaccttggtt ccacg 445

<210> 11377
<211> 403
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-009-Q1-E1-F10
<400> 11377

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gagtctctat gccgatcttg caaatttgct gtaaggacat gtgggaggtc catgggaatc 180
accattggtg caatgctgct agaaatccaa aactatatc agcaacacaa tcagtcttgc 240
ttcctttact tatccagtga agttattaag atatttggat ctgatccatc ttgtgcgagc 300
tatcttacat gtctgataca gacactcttt aatcatacaa tacaactgct cagaactatt 360
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<210> 11378
<211> 398
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-009-Q1-E1-F2
<400> 11378

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tcttgctttt ccaaattcca acccgcacg ccaactccct tcctcggtca agaaccgacg 240
gcgacatggt ggccaccggc gagctgcagc ccctggcgac ccagccggat ttctcagagc 300
tgcccgagct tctccggcgc aaagtcgagg gagagccgtt gccatcttc atccacgagg 360
ttaacgcta ccctgcagtt tggcaaatac acgttaat 398

<210> 11379

<211> 393
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-009-Q1-E1-F4

<400> 11379

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gtgcaggcag caatgctgga gcccgatgtc atcaggtaca gaaagctgga cagtggagta  180
aagcttgaag atgtagtcga tggcgaaggg ccggaggctc gggaaggcga ttagtgcaa  240
ttcaactacg tgtgccgccg tgcaaattgt tatttcgtgc atagcacggt gaatcagttc  300
agcggcgaga gtaagccggt gacacttcga ctcgacgtgc aagaggttcc angacaggat  360
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<210> 11380
 <211> 312
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-F5

<400> 11380

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ctagagccct attctgacat cttgttggag gggaacacga ccatggaggg gttcatcatc  120
ctcattggcg ctccctccga gaggcacgaa taattcacca cagaactatg ggtccgtaag  180
cagtagctaa atgggtgcgt ccctcttttt aatctcagta gaatgtgcaa ctctatgttc  240
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<210> 11381
 <211> 216
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-F7

<400> 11381

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 caatgaggca aatatggaca cacctacgtc gactgcacat ccatgattct cggaggcggtg 180
 cgtttgcaact gcactttaac ctaccgaccc gttttc 216

<210> 11382
 <211> 400
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-009-Q1-E1-F8
 <400> 11382

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<210> 11383
 <211> 424
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-009-Q1-E1-F9
 <400> 11383

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 tactttccag gcttgtcaat aagcagatct ggaaaatgcc aaagctgtgg gttgggttct 180
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 ttaatcgga gaacttgca aacaagttgc ccagacatac tttgaatatt ttgggcttcg 360

ttaacgaacc acagcaggca ccaatgccat ttgcgcccgc tgcattacaa acagcatacg 420
cgac 424

<210> 11384
<211> 193
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-G6

<400> 11384

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ctcttcggta acgtgcaatg gcctttctca actcgaagat tgggtgcaaac ttccgcggtg 180
catccaaacc ccg 193

<210> 11385
<211> 432
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-009-Q1-E1-H4

<400> 11385

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cagtctctc acggttctat gggcgcttct cattgctctg cttacaacgg tacttcatgc 180
cagcttcaga acacctaatt tgaaagcacg tctgaatacg ttcagagagg aattccgagc 240
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tacgcagttg tgattactgg ctcatcttga ggtggaccag gaccgactct gtangtgatg 420
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<210> 11386
<211> 444
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-009-Q1-E1-H9

<400> 11386

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ctcaagcacc aagagctgta caagaacgag cagtatcgga tgaagctgaa gaagtccaat 420
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<210> 11387

<211> 462

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-016-Q1-E1-A2

<400> 11387

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<210> 11388

<211> 419

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-A3

<400> 11388

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<210> 11389

<211> 451

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-016-Q1-E1-A4

<400> 11389

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gtagatactc agactctcaa tgccgtgatt atgaggataa ggaatatctt caggtccttt 420
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<210> 11390

<211> 418

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-016-Q1-E1-A5

<400> 11390

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gaccgtcagt cgaacgtaga ctacacaaat gtcaagaagg ttcttgatga tgttctccct 360
ggctacgtca aatctggagg caccttcnac aggccatttc gtaagtacgg taagcacg 418

<210> 11391

<211> 432

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-A7

<400> 11391

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aagtaaaggt tcttgcgaga ctgccttttc tggcattgaa ctgtccaagt gttctctctc 360
tctacagtat gtttattggt tcttgattca tgcgtgtgt gtgattgggc ctagagaaac 420
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<210> 11392

<211> 457

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-016-Q1-E1-B2

<400> 11392

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 ccaatgccag cggcacctct tcgaaaccca ccacctcggc caaggctcca gaaccaccaa 180
 agggttccaa caagtcccg aagaaaaagt cgaggtctta ggcgacaaag ttgttatgtc 240
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 gttatctgca ttggattgcc ctgcgctgtg cttttagaac catgtttatg gtgacttgag 360
 attctagact tgttgcaaat tttgttaagg ctgtctgact tatctgggta aaaaaaaaaa 420
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<210> 11393
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-016-Q1-E1-B3

<400> 11393

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 gaaggcgtac gtgaagctga caccagacta cgatgctctt gatgtggcca acaagatcgg 180
 catcatataa gtcagaggga gggctctgca gtaggcgctt gtgtcgtgggt ttcttgtgtt 240
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<210> 11394
 <211> 460
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-016-Q1-E1-B4

<400> 11394

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tgagatttta cagcttttcg tagtttagat cgagtttttt cttcatacct atagtccacg 180
aaaaagccaa aaaataaatt agggtagt gacatctatcc gaaccaatct gagcctttgc 240
ataatctttt ctgtgtttgc tttgttgaat ttgcgggtgc atcgctcgtgt caagttgctg 300
gtcttagcgt ctagtctttt agagttccga gttctgttca aaggttgctca cgtcgccgct 360
gccatatatc accaccgcat catcatcatc gctgctgcca tataccacca ccgcaccaac 420
ttcatcgccg ctgccatata ccaccaccac atattcaccg 460

<210> 11395
<211> 408
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-016-Q1-E1-B7
<400> 11395

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tccatgtcat cgtcgtctct cttgtcgaga gcaacatctc catctagttc atcttgtgtg 120
tctggaagct cctgtgagct gttgtggctg taccgaccac ggcaaccagt tggccgatgt 180
gtccgttctg caacaaatgg cgtgaattgc ctgcgaaccg cgtcactgtc atatccatta 240
agggacgtcc aaccctcaac caacttcccc agcacgctgg tcattctgga tgcaaactgc 300
ctaattatgt gctcaacggc tgccctcgcc tgtgcacgaa ccaagattca acactctgca 360
catcgtatta aagtcacgtg cacaggatca acactgacca tacacaac 408

<210> 11396
<211> 450
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-016-Q1-E1-C3
<400> 11396

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caagcggctg atgcaggacc ctctgcgagg cataagcggg gcgccgcagg acaacaacat 120

aatgctgtgg aatgctgtga tttttggccc tgacgatagc ccggtgggacg gaggtacgtt 180
 taagctgact ctccagttca atgaagaata tcctaataag ccaccaacag ttcggtttat 240
 ttctcgcatg tttcacccta acatttatgc tgatggaagc atatgcttag atattctaca 300
 gaatcagtgg agcccaatat atgatgtagc tgctatactt acatctatcc agtcgctgct 360
 gtgtgatcct aaccgaatt cgcctgctaa ctcagaagct gcncgcatgt tcagtgagaa 420
 caagcgagag tacaaacgca aagtgcggga 450

<210> 11397
 <211> 458
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-016-Q1-E1-C4

<400> 11397

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 agttgaaggc ttttcagccg gtcacatcgt gcgtccgagc acttggcttt ctcaagagaa 120
 cagcataaat gctgtgtaat gctgtcagtc gtgcgacagg atagaagccc atgtgaccgt 180
 ggaagctaca tcataactct ccaattcagt cacctatatc caaatcactg accatcattt 240
 cagatcatct cgccggtgaa tcacccgaag atatacaccg aaagcaccat acgctaaaac 300
 cacctatcga cacattgcgt cctaacaaat aagctagcag ctatagctat tcctatcaat 360
 tcgcagccgt ataatgccat gggacactcc ctgtctcagt caattactcg ccgcatgtgt 420
 agtgagaaca cgcaacatta cagccacaca ttccagca 458

<210> 11398
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-C5

<400> 11398

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 ttgaaagtct caagaagatg aacaagaaca agaagcttgt taagaagcta gccagaagat 120

accatgcttt cttggcatca gaggccataa tcaagcagat cctcgtctc cttggccctg 180
gtcttaacaa ggcaggcaag tttcccactc tggtagtca ccaggaatct cttgaagcca 240
aggtcaacga gacaaaagct acagtcaagt tccagctaaa gaaggttctt tgcattgggtg 300
ttgctgtggg caacttgctg atggacgaga agcagatcca aaaaacatc caaatgagtg 360
ttaacttctt tgtgtccctc ctgaagaaga attggcagaa tgtgaggtgc ctgtacgtga 420
agagcaccat ggggaagcgt gta 443

<210> 11399
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-C8

<400> 11399

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tgactccaac cgataagaca tctctctgct aactctcgag agatctggcg cgtccagttt 120
aactactcct atattatatg cgtgtgctc tagggctctat gcccatgttt ttcttttctt 180
tttctgattg acctatggcc acgtgtgtct gtcaatttgc actcactgat accacatgag 240
caagaccatc cgggcagaat ccatctagat atcttctgtt agactagtgc aagctgccac 300
ttctaatagg atccaacct aacctatgcg ttcaatgcta cgttcaaagc tcttcgatac 360
tgtcacct 368

<210> 11400
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-D6

<400> 11400

taccgttaca gaattcccgg gtcgacctga tctccgcat catcgcaagc tctcgttacc 60
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gcttggttcc gcacctagtt gatggtggta tatccatttt gcagtatgct gatgacacta 180
tcatctttat ggagcatgac ttggcgaaag ttatctttac ggccacagca ttgatccgta 240

tgtggtcgct actcacaccg acggaggcca gggggcgttt ggctactgcg tctaccgat 300
 gggagatggg agctcgggtt attttcaacc ggtttggatg gcggtcatgt aataggatac 360
 gcatatactg ctcctatttt atttgccagc cggttgtggc tctatgttta ggctcgcttg 420
 agcaaccttt tttcctttcc aactt 445

<210> 11401
 <211> 450
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-D7

<400> 11401

taccgggtcca gaattcccgg gtcgacctgg cattacttcg actggataat gtggtcggag 60
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 tatatgttca tggattttac cctcatgcgg ggggaacagt tgtccgacct gggagatttc 180
 ctggccacat taatggtgtt taccaactgg gtgattttac ataccttgac ggagacttca 240
 catctgagtc tggaacgtct ggtggaccag ttaccatggg agatagagtt attggagtaa 300
 atgtgcaaag tgtgggagga tcgagatgcg cggtttcccc tctgacacta tacatgacat 360
 ttatgaattg gtgtggtttt aatggcggag accatacaat tgctgcatg atacaacgcc 420
 ttgtgccta atcagttttg caatgtcaag 450

<210> 11402
 <211> 451
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-016-Q1-E1-E1

<400> 11402

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 aaccatgatg acatcctcta gcaactacaat ttcttttagtg tatggggcga ccttgatacg 120
 ttcggcgtag tagcaggcga tggcgatgtg gccggatctg tcattgttag tcgaagattg 180
 gaaacaaaac acaagaatag tgtccctttc aactactaga atgtggttgc taatcaaaag 240
 caggagaatg tatctctggt tcttaccaat tcttactcaa catgtggtga ccggtaacca 300

atggtgtata ttaccaccaa agattgggta nagtgcctgg aaggtcatgc caaattgcac 360
 agtgaatccg tggagcttgg taggcataaa tatggtagta atgttagtca taatcaattc 420
 agagatggaa gttgcacaaa tggacaataa c 451

<210> 11403
 <211> 435
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-016-Q1-E1-E3
 <400> 11403

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 aatcaggggt cctcgcggta tggaccgggc gcctgcctcc gcccccttcc cgaagtttcc 120
 gcgctccacc atttcgccat ggccggcggc ggcattctca gcagggcgct gagctacgtc 180
 gtcaacgagt tcctcgctga gggcctcgcc aacaaccgtg ccttccatag gtttgctgtg 240
 aggaccaaca tgactttgga ggatctctct tctaaagcta aacatgctag ggaggagata 300
 tcggagcaat tcaaggatgc tcgtggaccc aatgatcgct tcaagcagtg atgcccgtc 360
 cgagtcactt gttcttgccc tggttcggga tgccatccac aagtggccat tgtataaaat 420
 ccgaatctaa attac 435

<210> 11404
 <211> 452
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-016-Q1-E1-E6
 <400> 11404

ggtaccggta cagaattccc gggtcgaccg acagaagggt gctcttggtt ggttgatcac 60
 caatggtgca ggtcttgcac cttaccccat tgacaccgtc cgcagaagga tgatgatgac 120
 ctccggagag gctgtcaagt acaagagctc cttggatgct ttccagcaga tcctgaagaa 180
 ggaggggtgcc aagtccctct tcaagggggc tggtgccaac atcctccgtg ccattgctgg 240
 tgctggtgtg ctctccggct acgatcagct ccagatcctc ttcttcggca agaagtacgg 300
 ctcaggcggg gcctagaggg gacgaaatga tgacgaacaa gagaagtttg ttcccagtc 360

tacccttcga ggatctggtg aacttttatac tttttaacgt tggcaggcaa taattattgt 420
agagggtgga ttttcccaac attcgttttt gg 452

<210> 11405
<211> 450
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-016-Q1-E1-E8

<400> 11405

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tgcaaaggcg ctgcaaaagg ttgatcctct ggtgccatcc aagggtgctcc gaagagatgc 120
tcctccacag agtttgcttg tgttgccgaa ggaaacaata aaagttgctt cttcccacca 180
gccagacagg cagctgcagc ccgttctgca caaaccgaag gtgcctgtag tctctcccct 240
catcaaacag cagcagtcaa gcaccttggc gaaagaagag ccttgctcct ctggcaggaa 300
gactgaaaaa ataccagagg ttaagcagtc aaagtctgat cgtaagaaga gccgcaaggc 360
tgagaaggaa gagaagaaag agaggaaatt ccgagatcct tttgttacct ggaatccacc 420
ttccttgagg gttgangaga ccgggaatct 450

<210> 11406
<211> 336
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-016-Q1-E1-F1

<400> 11406

cctgcacgta ccggtccaga attcncgggt cgacagctct ttctttaaca ttatggcgta 60
gactatttaa ctttactcgt ctgaaattga tagagatata gtcattggagt aataaagggc 120
gaaagtgtat ttggatatta caagtagctg cttgtgacaa tagctaaatg ttgtagggtg 180
gtctgtcagt agatgagttc ttctatgtac tgtacatctg acatccgtta cttttaacct 240
tattctgata gtagcaaaga tactcatgaa aaggacagca catgagtttc agagtaatac 300
aatataccgc tggggccttg ccagaaattt gatctc 336

<210> 11407
 <211> 448
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-016-Q1-E1-F2

<400> 11407

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gggccagaat tcneggggtcg acgactgcaa tctttcaggt tatacacatg tatacataaa 60
cggccgcccc ggagggcatca tattcctttc aggcaaaagt ataaaaatag cttataaaaa 120
attataaaaa gcatttcgct tacaatgaga ttacatatca ctcaaacata atattttttg 180
agcactgggt ctctatcaaa cgagcaccct caagaacttc ttcaaagtag tgctcagcag 240
cccttcgacc tatggccaaa tcttgcgctg caacattggg agcatccatc tccgcccagt 300
atgctttaac agggggcaa at gtcacccgtg cgccctctat gcacgccaac ctcttcacg 360
cattaatgcy cgacaccacg tcaaggaact gctgcaccaa gttaaaatag ctattcgggt 420
ttgaccttc cggccatagc tgatccac 448
  
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<210> 11408
 <211> 453
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-F5

<400> 11408

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gtgtctcagc actccaagta cttctgtgag ttctgtggga agtttgctgt gaagaggaaa 180
gcagttggaa tttggggatg caaggactgt gggaaggatga aggctggcgg tgcttacact 240
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gaagcataag ttgtactag tgtttgtcc tagtgaatca tctgggattt cgcagtttag 360
acgatacttt ggattcagtt ccattggctg tttagtcaag gattatcttt gtacttggtg 420
cgatgatggt ctgttatggt attctccac cct 453
  
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<210> 11409
 <211> 450
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-016-Q1-E1-F8

<400> 11409

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tagtcattct caccctcaga tcttcagctt tcggcaccat ttcgaattga atcacacaga  180
aaaactgccc ttggggaagg ctggccaag tagaagagaa ctagctgacc cttcccaaac  240
ttgttgcttg caacaaatct cctccatcca ctaccataca ttgcgtcttt tgtgggcccc  300
ttgtgacact taacgggtga ttttcgtttg ttgacctaa acttcagtgt atcccctgtc  360
aagtcgttga aaccaactct ttcgttgaat ggcacaacct gttatgtgtt gaacacacaa  420
nanagaacaa caacatgaac aatcatcaaa                                450
  
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<210> 11410
 <211> 287
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-016-Q1-E1-G1

<400> 11410

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gagtcatatc ttgttctaag tatcgagttg taatttttga gttgtaagta aataaagtgt  180
gatgatcatc attattagag cattgtccca gtgaggaaag gatgatggag actatgattc  240
ccccacaagt tgggatgaga ctccggacga aaaaaacaag ngcatggg                                287
  
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<210> 11411
 <211> 451
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-016-Q1-E1-G2

<400> 11411

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cctggtgctc caccgacctc aactccaact ccatatgttc acgttcgggg agaaaaaat 120
cggagagaag gattcatccc gttttacgat acggagccgc cgccaagccc taatctctct 180
cgggaggggt gatctggagt ccgttcgggg ctctggagag ggaatccgt cgccgtcgtc 240
atcatcaacc ttctccatc accaatttca tgatgctcac cgcggtgcgt gagtaattcc 300
atcgtaggct tgctggacgg tgatgggttg gatgagattt atcatgtaat cgagttagtt 360
ttgttagggt ttgatcccta gtatccatta tgttctgaga ttgatgttgc tatgactttg 420
ctatgcttaa tgcttgtcac tanggccga g 451

<210> 11412
<211> 451
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-016-Q1-E1-G3

<400> 11412

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acgggacacc tttgctctc tcaagtggta tcagatttcc aggttgctcg gtgagatttt 120
acagtttttt tgtagtttag atcgagtctg ttcttcatac ctacagtcca cgaaaaagcc 180
acaaaaaaaa aattaggggt agttcatcat atccgaacca atctgagcct ttgcataatc 240
tttttagggt tttgctttgt tgaatttgcg gttgcatcgt cgtgtctagt tgctgggtctt 300
agagtctagt ctttttagagt ttcgagttct ggtcataagt tgtcacgcgg cccggcgcaa 360
catcatcaat caccctgcc tetaacagca ccgctttacc gccaccgctt ccaatcggtg 420
tcaatatacc accacaactg tcatatacca c 451

<210> 11413
<211> 463
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-G5

<400> 11413

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tgtcaggaaa gtttccaggc actcaaggac aagatgactt ctgccccagt gcttgcccc 180
tgattctcgc aaggacttcg tcatctattg cgacgcttca cgacaaggat taggctgtgt 240
cctaattgcaa gaccgcaggg tgattgctta tgctctccgt caagtgcgtc ctcatgaaga 300
gaactaccca gttcatgacc tcgagcttgc tgcgggttatc tttgcaactga agctatggcg 360
ccagtacctt ctcggtaatc gttgtgaggt cctcaccaat catcagagtc tgaagtacct 420
gtttactcag ccagatctaa acctccgtca gcagcgatgg atg 463

<210> 11414

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-G6

<400> 11414

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atggaaaccc tgtagaggca cctgttggtca atcgtaggtt atgcgggtgag attcaaccca 120
gactcatttc ctgcaggagg aaccagtaat tggtgaccat catgagattt tcgatagttg 180
tttagcattg gcgacagcct gacagctaag aagaccaga ttcaaaggag cttatttgat 240
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agtttaccga cagaatatga gaagactggg accgtcaaac caattgatgg gtgtatgagt 360
tttgttgga gtgttaccat gcttctgagg gtggtagcac cccatacctt gtgtggatga 420
atggattttc aaagagagcc tccaaacct 449

<210> 11415

<211> 393

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-G7

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tgatgggata tacactccct tatcaggtcc ctcaatttca cccaaattga aataaaaact 120

gcaaactttg caaattcatg ggaaaatggg gtgcaattga tggccaatgg ccttgtacag 180

accgaagatt acagcaccca aaggaaatth atcaatatgt ttctccttgc gccacaggag 240

aagggtact ttgcgcacag agaatatctc cactttgggt accgaaaaaa tgtgcactgt 300

gcacgtgtga gctcacgaga cccttttgac accatgggtat catccacagt ctccacacat 360

gctgggtaca atcatcatga aaatcgtcca atg 393

<210> 11416

<211> 379

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-G8

<400> 11416

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tatatgcata tttgtcaggt gatttcgagt gcaaactatt caataatcta tttgtgttat 120

ccagaggagt aatacttcac acacttttgt gttttgtcta attgcagggt tatgggacat 180

ttgtacaatc cacatatgaa gataaggaag aaagagatgt ttatttgctg tccaaaaagt 240

tctctcacgt cacttttggc ccaagagaag atagagtcca agtctctcac gttctggatt 300

cagattcgga ctgcacagac atacctgact caagacgcac acaagttttt catacggact 360

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<210> 11417

<211> 452

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-016-Q1-E1-H3

<400> 11417

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gctgggtgctt aggtcacatg tggtgggttct tctgagtggg aggaacttca tgaaggagaa 120

ggtgaaaaca agtggtagct ttgtgctcag aagatttggt gcgtttgact ttgcaaagcc 180
 tggttccggg aaaggatga aaatcgagga cctagatttc accgaggaag aaatggagat 240
 gtatgtggat ctccatccaa tcacaaacac ttcgccgtac acggtgggtcg aaacaatgtc 300
 gcttgcaaag gctgcagtcc tgttcagggc actagggcta agacacctgc tggttgtgcc 360
 aaagacccca gggagatttc ctattgttgg gattctcacg aggcacgatc tgatgccgga 420
 gcatatccat gggctgttcn ccaatctccg ca 452

<210> 11418
 <211> 452
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-H5

<400> 11418

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 ggaattgtgc ggacgcctg gaagccgagt tggcagcaat ccatgaagga attactctgt 180
 ctcttaattg gactgaacta gatatccttg tggagactga cagcgctgat gcggtgcaac 240
 taatttcggc agccggaaaa gaccgttcaa cacacactca caaagtaatg gagatcagat 300
 caatactgtc tcaagaaaaa aggattcaaa ttatgaaaat caagcggaat gttaatgtac 360
 ctagtcaaac tctcgctcat atgggacgta cacaacaaca tactgcttgc tggttgcgtt 420
 ctcccccgga cgagattgag agcattgttg tc 452

<210> 11419
 <211> 368
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-H6

<400> 11419

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 agcgaccgcc tgtggaacaa aggtgctcgt caagtggagc gacgacaaca ccagcagcga 120
 catcacgaag ctctgtggcg cgcacaccgg gaccacggcc gacatgatcc gcacccagaa 180

atggtacacc atctataaag accacatcac cctcagcgac taccagatca caaagggaag 240
 gggccccaac tcaactacaa caagcgatcat aacccccgca attgcaggtc cgtcaccaat 300
 cgtgcctgtg atgagcggtg gttgcattcc agtcccaatg tcatcacagc tcgatgtgtg 360
 ggctgaac 368

<210> 11420
 <211> 453
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-H7

<400> 11420

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 atctactccc ggggggcata ccgcttgac tcccggcgaa tctacaatgt catcgacaac 180
 gtccaagcca agcccaaaca tgcacagtac ttcaacaacc acatcgacgc cgctcaaggc 240
 cgacgaggca agacggctag acgggctgg ctggagcaaa ggccacgttt tcgacggcgc 300
 gtgtaccact ccgtacacgg actctgccgc cgccacacac acacaccacc accatgcatg 360
 aggaacgcga agcaaagacc gaagatgacg actacgcagc ttaatcgat gtgtcccgcg 420
 gtgctatctg cgggagtaat taaccggggg ctt 453

<210> 11421
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-016-Q1-E1-H8

<400> 11421

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 aagttcttta cctctcagtc cagcaattat tacttgcta ctcatctgga atgggttctg 180
 gaatcaatag gtttaaagt cgaatgcact ggattcaagt ggacaatcaa ttgccttttg 240
 tttcaatgcc tgtcctcttt tgtctcaga agacggacaa tcaatcagac catgtgtca 300

agttctctat gacgatgcag accaataatt ctctagattt ttgtgtttat ccatatattg 360
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 gcctccacga gatggttcaa cacct 445

<210> 11422
 <211> 442
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-018-Q1-E1-A9
 <400> 11422

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 aggaaagttg gatcagcagc tccctccttg tagtaggcga acaccacgcc gccatcatca 180
 tgcattgctct cgccaacaaa gaactgaagg tccttgagct tgctaagaag atactttgtg 240
 gcggactcaa cattcttctt gaaagcatct aggtcatccc cttcaagctt ggagagagg 300
 ttcttgatgt agcgcttcat gtgagagata aactgcttct tgtcaaaagc aggttgctcc 360
 tgaagacgga aggtgtcaac aatgtcaacc accttcacgg cctgggtcatc aacaccctca 420
 tcatcaccac caccctcagc ag 442

<210> 11423
 <211> 355
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-018-Q1-E1-B12
 <400> 11423

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 tcactcatgg attactcctt cccgtaggaa atggtaatgt tgtagaggga taaatgggaa 120
 gagacgatta taaatccagg aagtttagaa tctaattcta actgttggtc cctgagaaat 180
 gactccattg acgtggcagt ctttttcttt aaataagatg gggttatatga agaaacggta 240
 ccaaaggagg agaaaactgt attctaagga ggaaaaaatt aataggaatc tttctgagct 300
 tctgggataa agcttacagg gtttgaagat tagtacattt gtatgtgggg agaaa 355

<210> 11424
 <211> 397
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-B9

<400> 11424

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ggaagctgct ctagaagcag ctttggcaga gaaggagctt cttgaagagg agtacaagaa 120
gaagtttggg gaggcacaga aaaaagagct ttctctagaa aatgatctac caggcatgtg 180
ggttcttggt gctaagttga agagaggggc ttccagcata tctgatttaa acgttgatga 240
tcggtctatc aatctagctg agataactaa tgatgcagag gaaaacaaag gtgacacaaa 300
tgtagcctta gttgagaaac aagtgtcaga tgatactgtg aagccattga ctgcagaaga 360
atatagaagt ccagaatttg aacctcttcc tgttcgt 397
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<210> 11425
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-C9

<400> 11425

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tgttaacaag gctgttggtc cggccaagag attctcggca ttaggaattt gcaagtgggt 120
gctctccgta atcttttgga gaagaagctc tactaccagg tatacgtttg gcttgatcaac 180
tacgttcctt ggctcctgc tgctcctcga cagatccacc acgttgagtc catggcggcg 240
tctgcatagg ccacagcaat gaccacagcc tccgccatcc catagccaaa cacatgtaaa 300
tgcagaactt cagacgattg gttaccactc tgttttgcgc gtgcattgca ttctttgatg 360
atctgtttct tttcgttttg gctgagtaca gcgcagtatt ggcgatgtaa gttttggctt 420
tcaagctttg agcttgctgt 440
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<210> 11426
 <211> 413

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-018-Q1-E1-D12

 <400> 11426

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 cagacggttg agttcagata ccgcatcatg atgcagacac tcctactcca ggaaggtcac 180
 agcttttgta tcatctactc cagcaggaaa gatagtagga tggccgatgt tggatgcatg 240
 gtccatatcg ttcagtgcga taagctcgtc gatgaccgct tcttcctgac gtgcgtcggc 300
 ggtgaccggt tccgtgtcct ggaggtcgtc agaacaaagc cctatgtcat cgcaagagtc 360
 cagggtactga aagacagaga ctcacctgat tcaagtaacc tgggggtgcct gat 413

<210> 11427
 <211> 65
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-018-Q1-E1-E10

 <400> 11427

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 ttgtg 65

<210> 11428
 <211> 313
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-018-Q1-E1-F12

 <400> 11428

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 gaccctgatc aggctgatg gcaataacaa ggactacgtc aagctgacag gagacgagga 120
 tgctcctgac gtggccaaca agatcggcat catataagtc agatggacgg tcctgcaata 180
 ggcgcttggtg tcgtggttcc ttatgttatt ggagttttgt agctgttact tagcagaggg 240
 gctcagtggc tccattgcct accatctcac cgcgcacttt catgaatttg ctgcaatoga 300

agtgacttgt gtt

313

<210> 11429
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-G10

<400> 11429

gggccagaat tcccgggtcg actccaatga acatgtgctc ctctttaatt ctcaccatca 60
aactatcctt cccagacttc ctacaggtat ccatgtacca ttcattgcaat ctttgcatca 120
tcgttgtagt agggaggatga tcaagtttga cgagaggctt cccgtactcg tatctaaaga 180
tctctacctc taacatttca aactgtacaa gattgctcag gtaatcacca agattggtag 240
cgggcaatag ccccggttga ttagcgacga taccctagac accttgagcg ggggacacaa 300
ttgcttcacc tgttcacga gctggggaat tgttttccca tttcttcggt ctgctaattc 360
tgcatcaatg gaagtacttc ccatcgctt cgcattctca tatgtctttt taatatagcg 420
ctcatagttg gaattcg 437

<210> 11430
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-G11

<400> 11430

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gatgactctt ataactctc gaggaggat tacgaagagc gctattctag agatgagcac 120
agagacagga ggcacgttg aacgcagaag ttatcttaa atgcattctca tttctatgaa 180
gcgaagtgcc acgctggtag atcttattga gcaaggacag taacattggc gccattgaag 240
aaggctcagt cacctagcgc aagatttcgg ccatatgttt actgctagtt gtccagcaac 300
gctgttttgc cgctgcggtg aagttttgtt tgctcatgtt tgtatggact ttctctctc 360
ttttgtcagt cttgagtatg taatgtggag gttatattgt tacaccggtg gcatcatgtt 420
gccagcagg 430

<210> 11431
 <211> 421
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-018-Q1-E1-H12

<400> 11431

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ccccgggtcga cccgacatga taaaatggat ctctgcagaa tgcgctccga tgaaggctcg   60
ccaagggagg atggtgtgat ttggatctga atcctcgtct ttttaatagg cagctcattc  120
acacagctag gggggtaaata gtaaaaacac cctggctctt cacattcgct cgacacgtgg  180
taagtgggtca ttactgggcg tggaaccaa tgagtgaac attcacaaga ggccggacac  240
tatttcgaca ggtacacgga atttgagaa ggacccgccc tgcaatgccg aagacaatac  300
ttcgcgctgg actcatcgtc attgaagcct ggttcggggg ctactgagga agtcctggat  360
taaggggtct ccggacaacc ggattatatt cttcggccgg actgttagac tatgaagata  420
c                                                                    421
  
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<210> 11432
 <211> 463
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-A6

<400> 11432

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ggtggccctt actgggacgt gccactcggc cgcagggact ctctgggtgc aagcatccag  180
ggatcaaaca atgacatccc tgcccccaac aacaccctac ccaccatcat caccaagtgc  240
aatcgctctg gtctcaacat cgtcgatgtc gtcgccctct caggtggcca caccatcggc  300
ttgtcccgct gcaccagctt ccggcagagg ctgtacaacc agtcggacaa cggcctggcc  360
gacagcacac tggatatgtc ctacgctgcg caactaaggc aagggtgccc ccgctccggt  420
ggcgacaaca atctcttccc actcgacgtc gtcagctcga cca                        463
  
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<210> 11433
<211> 357
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-019-Q1-E1-A8

<400> 11433

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tcaagaaaat gtatgacatt caggccaaga aggttaacac cctcatcagg cctgatggca 120
agaagaaggc gtacgtgaag ctgacaccag actacgatgc tcttgacgtg gccacaaga 180
tcggcatcat ataagccaga gggagggtcc tgcagtaggc gcttgtgtcg tggtttctta 240
tgttattgga attttgtagt tgttactaag caaagggcct tagtggctcc attgcctacc 300
atatcgctgc acactttcat gaatttgatg cantcgaagt gacttgtgtt tatgcta 357

<210> 11434
<211> 360
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-A9

<400> 11434

taccggtccg acgattcccg ggtcgacaag atcagtcaaa ccgacgacta tgcgagggat 60
cacaagatct tcgactgacc ccatcaccgt ctagatacct cggttcaagg tcatccggcg 120
cacacttcat aggcaacgca attacgtgag gatcgactgc aacatgttca cacccatggg 180
gctgcacgga ttccacaagc acaaccattg gttttgtcgc agcttgccac ccatttttac 240
catgctgtgt atgaaacttg gtgatcagtc tctcatggag tgtatgtatg ggctgccctt 300
ttacaaaata tcatatgcat gtttggttga tgactacctg ggggatocaa gcttaacttg 360

<210> 11435
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-B10

<400> 11435

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 cagccaccga caaccggagg cggcgccatg tctcagaaca acccctccca gtcctcctcc 180
 tcagagctga tcgaccggtg catcggatcc aagatttggg tgatcatgaa gggagacaag 240
 gagctcgtcg gcactctctg cgggttcgac gtctacgtca acatggctct cgaggacgtc 300
 accgagtatg agtataccgc cgagggcccg cgcattacga aacttgatca gatcctcctc 360
 aatggcaaca acatagccat cttagtctct ggtgggtcac cgccagatgc tgcgatgagct 420
 agcaagcact tctggaggat atctgtttg 449

<210> 11436
 <211> 435
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-019-Q1-E1-B5
 <400> 11436

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 gtagaaggta gaacgcgggt tgggtgctaga caccgatgac gccttgtgaa atctggtagg 180
 ggaagccgca ctctttttac gcggtgcatc ctttcatgca ttcataatca catcacatcc 240
 tgattatcta tgagaaactt ccctatgaga acatgatata ttgaatgatg aatgtcatac 300
 tgccagacag atgggggtgt atgaacgaac cacggaacga catancggca tgccatcact 360
 agcgcagact ccattaatac tgactatgcc gatcacacat taatacgtcg gtcatagacg 420
 tcatagctct tctaa 435

<210> 11437
 <211> 259
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-019-Q1-E1-B6
 <400> 11437

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tactttattt gagaaactta tagttgggtt gcaatgtacg tattttctag cttgagttta 120
 cctcagttgt agtttttttt aaatacatga tacttgact tttatagaca tgtgtaacta 180
 ccatttttag tacagggtgca actgggttgc gacgtatgta gtttcaagct tgagtatccg 240
 tcggttgccg cttttgata 259

<210> 11438
 <211> 451
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-019-Q1-E1-B7
 <400> 11438

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 ggtcagtatc atgggacaac tcatggcaac ctggccgtgc tgtaagattg cctgatccaa 180
 gcaaaatccc tgaattatgc gctcaggatg acatgaagta tgcctttgag ccgcttttca 240
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 ttgatgcaag tagcagcagg gcttacagct caatttcagg tggcactgat agtgagcaa 360
 gcccgctact tgaagggctc gagaatgaca gtgctccgag tcatcattgc tgttatggct 420
 ggaccgaaga ctggcgatgg ttagtgtgca t 451

<210> 11439
 <211> 464
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-019-Q1-E1-B8
 <400> 11439

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 cctatccatg tgccagagcc atgagttggt tgcgagatct tatgggtttc acctctagcc 180
 taccccaact tgtttgggac taaaggcttt gttgttggtt ttgttttttc tgggaggact 240
 gtactaacat attgaaattt tcacagtgtg ggcgttcgga ggctgaggaa ttaacgagag 300

agcccttatt ctgatactga acatacattg gtctccaaac cccagtagaa gacaaatact 360
cagcatatca gacagggcat actcttacct ttacacactc gaatattgtc accctgtgcc 420
tctgtacggc ttgtgcatct actgtaatgg cctcataag tatg 464

<210> 11440
<211> 457
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-C5

<400> 11440

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gctgccaaagg tggtggagca gctgagcggg cagtcgccag ttttctccaa ggcgaggtac 180
actgtcaggt ctttcggcat tcgtcgtaat gagaagattg cctgctatgt gacgatcagg 240
ggtgagaagg caatgcagct tctcgagagt gggctgaagg tgaaggagta cgagctcttg 300
aggaggaact tcagtgcac tggttgcttt gggtttggtta ttcaggagca cattgatctt 360
ggcatgaagt atgacccatc aaccggcatc tatggatgg acttcttcgt ggttctggag 420
cgagctggat accgcgtctc ccgccggcgc cgatgca 457

<210> 11441
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-C8

<400> 11441

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cctggaacta caggagctgg taattgcgta ggcggggtgg tggctctccg acatgcttgt 180
tgatgtgtgg tagttattgg tgtgctctcg gccggctcca gacgaataag attcttcggc 240
catagcagca cccaaccctt gcagcttcca atccgcgacg gggctctcgt gtcogctccc 300
acatgctgta ctggaggagg caaatcctcg tgccccgatt tcacactggg caagctaacc 360

ctgaagtacc cagcggggat cggtctggtg tggaacgtgc gttgagaggg gtccattatc 420
atcccccttc ccacgtccac cttctggccc ttgatcaagt agag 464

<210> 11442
<211> 442
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-019-Q1-E1-C9

<400> 11442

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gtttctctgt aaataattat ccccttatat atatccattg tattataaaa ataatgtgcc 120
aagctttggt tttaggatga ttagattgct tgcttactat gtgcagaaca aaaacagaaa 180
ctttggctgt agcgcgtgat tttacatfff ttcttggaat gtcaaatggg tctgaaactt 240
tctgcacatt acttctgtat aaatffffca aattgtcaaa tttatttcat aatgtttgga 300
gttacagaag tttactaaac ctccagatta ctacagactg tcctgtttta gacagattct 360
atffffctatg tgttgtttgc ttatffffgat gaatctatgg gtagtatcgg ggggtttgaa 420
ccatggtgaa gttggnatac ag 442

<210> 11443
<211> 436
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-019-Q1-E1-D10

<400> 11443

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atcatgtgcc atgggatcca ggtggtttta catggcatcg gcttgaggtc aagccgaatt 120
ttaaggaaaag gggaatgtta gcgaccaacc tactcttgct tgggctgggc catgggctgc 180
gggttttggg ctgcagtgag gcctcgagga aactactaca agtacacacg aaggctctaa 240
gaagaactcg gctaggaact ggatggcttc ggctctctcc gcattctgtc tttctcttcc 300
tctcgtgttc ctcttcttcc tgtgttggtta aagcttgagg aatccatggc tgtaatctcc 360

attgatgagg aatagagagt gtgttgctaa cattattact anggaaaatg aagcaacggt 420
gttaaaggat gggctg 436

<210> 11444
<211> 455
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-019-Q1-E1-D8

<400> 11444

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ctggtctcca gatggttgct tgctccactc cttacaatgc caagggttta atgaaggctg 120
ccataaggag cgagaaccct gtcgtgctat ttgagcacgt ccttctgtac aacctgaagg 180
agaaaattcc ggatgaggag tacactctat gcctggagga ggctgagatg gtacggcctg 240
gtgagcatgt gaccatcctc acatactcgc gtatgaggta ccatgtgatg cangctgcaa 300
agacgctggt gaacaaaggg tacgatcctg aggtgattga cattangtcg ttgaagccat 360
tcgatctgca cacaatangc aactccatca agaagacca ccgctgctg attgtggagg 420
agtgcatgcn cactggcggg attggcgcca atctg 455

<210> 11445
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-E12

<400> 11445

gggtcgacac gacagaatgg ctcgattggt agtaaccccc gtgccgaaca ttccacatca 60
taaagttgtg gagcctcgct ccattttca tcacatacca caagcacggg gtaccaacgg 120
tgtgtccggt gccctgtgaa aacagtcatg gccgccctac ctggcacgac cccgtcccaa 180
gagagagcac caactctccc ccgtcactag taatgcgggc tccaagctag tatcgggtcta 240
ggtactcaat aatgcccttt cccatataag ggtagagtgg tcgcgcatgt aaggttgga 300
taacggtcgc aactccgacc aatccgtttt gaaaacaaca cacacctgcc ttggcacacc 360

acttcgtcat caagtgggtca cccatctcat catctccctc gggcataggt ggcacccgac 420
 ggggtttttcg aaaagacttt tgaaatcaca 450

<210> 11446
 <211> 429
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-019-Q1-E1-E3
 <400> 11446

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 tggagcatgc tggtagacagag gccgatccaa gtaaagaagc atctatacct cctcaagagg 120
 aaaccactgc tgtagccttg gttacaggac cggaacaaaa tgaagaagca gatgcaccta 180
 ctcaagtcga accagttgct atagtgccag attccatgga gcatgctagt accgaagttg 240
 atcaaagtat agaaacatct gtgcgtctcc cagaaaaaac ttctgttata cctggtagcg 300
 aaccagaaga gaagaaagta gaggcacctc cccaagagga taatgttgaa gcagttgctg 360
 cagagccaga acctgctgga tcccaggaaa atgcagaagt ttctaccaag cctagtccta 420
 tggagatag 429

<210> 11447
 <211> 472
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-019-Q1-E1-E8
 <400> 11447

cgccaggtagc cggactagca ttcgcggtgc gaccaatggt atgagggtg gaggcatact 60
 gtatcccatg acgcggtcgc cgggggttgac ggcggtgtgg aagtagtcgg gccagcgagc 120
 caggtagctc atgtagaagg acatgttgaa ctgcggcgag cgaatcgacg tatcagaccg 180
 ggaagaggac ggccggacgg cgctcgtggag aaacagtagc aacaaaggga gcgagagatg 240
 gatcttttgg ggatggctta cggctctcggg gaggtggtcg aggttgaccg aggcgaagcg 300
 gagcagatcg tcgcagcaga accggcgaaat ggtcgtcatg gtctccctcc cgtcctcggc 360
 ttccggcggc ggcggaatct cgtggcgagg cggggcgggg gcggcgctct atccggattt 420

ccgattcggtt tgtgcgggtc gggttggaac caggaagagg cttcctgcga tg 472

<210> 11448
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-F10

<400> 11448

gggtcgactt ctcgtggtta ccgatgcgcg gaactgcatg gaaggtttga agagatcaca 60
ttccaagctg ccgatgaaga ggaatctggt ttgcatgact cagggggcag ctctgatgat 120
ggaggcggtc aaaaagagca acatgtcaaa gacaaggaac ccatacgcct gaatgggttc 180
ccaaagatgg gtagaagagg tctttctgat cggctttgct tcagttcttt ccaggagcgg 240
tcgtgcccaa ccgagaatta tgaaagcgat catcagtcaa aggggttcga cataaagcat 300
gaagtgaaga tggccaagta caaagcacgg aaaatggcac acctgaagag agctattcat 360
ccatctctgg acttcgacaa caacaccaat ggagcaagta gaacgaagcc tacactgagc 420
a 421

<210> 11449
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-F2

<400> 11449

gggtcgacca ccactggtta tctgatccac aagcttggag gtattgacaa gcgtgtgatc 60
gagaggttcg agaaggaagc cgccgagatg aacaagaggt ctttcaagta cgcttgggtg 120
cttgacaagc tgaaggccga gcgtgagaag ggtatcacca ttgatattgc cctgtggaag 180
ttcgagacca ccaagtacta ctgcaccgtc attgatgctc ctggtcaccg tgacttcac 240
aagaacatga ttactggtac ctcccaggct gactgtgctg tgctcatcat tgactccacc 300
actggtggtt ttgaggctgg tatctccaag gatggccaga cccgtgagca tgccctcctt 360
gctttcactc ttggagtga gcatgatc tgctgctgta acaagatgga cgccaccact 420
cccaagtact caaaggcccg tta 443

<210> 11450
 <211> 444
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-019-Q1-E1-F5

 <400> 11450

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 aagactctca ctgggaagga gatcgaaatc gacattgagc ccaccgacac gattgacagg 120
 atcaaggagc gcgttgagga gaaagaaggc attcctcctg tgcagcaaag gctgatttac 180
 gctggtaagc agcttgagga tgacaagact gccaaaggact acaacatcga aggtggctcg 240
 gtcctccatc ttgtccttgc tctgaggggt ggttactagt taagctgtaa tggaaacact 300
 tgctcctga gagaagtgc cattggtggc atggaacctg tgttggtgtt gcaaagagat 360
 aataacaaac tagctttgct tagtgggagg ggctgtcttc catgttatct gcctatatga 420
 ttgacaaaa ctagtcgcaa ctcc 444

<210> 11451
 <211> 438
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-019-Q1-E1-F7

 <400> 11451

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 gcgtggagaa ttgttggtgat cttatattga tatacatctt tttttaaaat ctgtttgaat 120
 gtgagtcgaa atttcaggat taaaaacagt tcaaacttgg taatattatc ttgtgaaag 180
 tgtgacaaat gtgctgatcg tgtgctcctt gagaataata attctaattt ttgtgcatgt 240
 tgatcccgtg gcactgatag aacgagcgaa tgcattgctt gttttaagta taaatttcta 300
 ttaaagctaa ttaaatttaa gtaaagtgc cactaactcc tggtattaca gtaccaatac 360
 agaccgctc gtgaaccgat gtgtggccga ggtgcatct tctagcctcc tctagcctcc 420
 acgggatact gttcatct 438

<210> 11452

<211> 443
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-019-Q1-E1-G10

 <400> 11452

 ggggtcgactt ccatcaaagc gatattcatc atctcatcga aagacgggac acctttgcct 60
 ctatcaagtg gtatcagatt tccaggttgc tcggtgagat ttacagttt ttcgtagttt 120
 agatcgagtc tgttcttcat acctacagtc cacgaaaaag ccacaaaaaa aattagggtt 180
 agttcatcat atccgaacca atctgagcct ttgcataatc tttttagggt ttttgctttg 240
 ttgaatttgc ggttgcacgc tcgtgtcaag ttgctggtct tagagtctag tcttttagag 300
 tttcgagttc tggtcataag ttgtcacgcc gccgccgcac catcatcatc gccttgccat 360
 ctaccaccat tgcttatccg ccaccgcttt gaatccgtat ccatatacca ccaccgctgc 420
 catataccac cgccatatat cca 443

<210> 11453
 <211> 455
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-019-Q1-E1-G2

 <400> 11453

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 gacaaggccc acaggaacag gcacccggac tatgagttct tcctgtcccg acagcaacgg 120
 tagacgaccc caagcttttt gcacacacca tgtttcagaa cactgacggg ggccacttcc 180
 cctgtaacca gaaccatccg gactgagcgg cgccgtccgc ctgtgttacc cctgtatata 240
 tttgagatag aggtacatgt ggaggtgctg ctcaattgaa agtgaaacca gaccagaaaa 300
 tgtttagctc actgcttact tactagttgg ggttgatata atangtgcaa ccccttttta 360
 aatctaatta gcttgctcac ccatgtggtg tgtgtacata tatgcctgta actcaactcg 420
 gcactgtatc tatctaactc tgtanctgca taata 455

<210> 11454
 <211> 456

<212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-019-Q1-E1-G7

 <400> 11454

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 tcaaagatga tgagattctg gtcttgctcg tcgaggaccc aatcacaggg ctttctgtcg 120
 ctgccgcaat gcattaggaa aagttcaagt ttcctattag atttagttct attggaaaag 180
 ggctgccctc accgcgctta tccccatcgc cggaggggccg acgtgcaggg gttggggccac 240
 agccgacact tccgttcgtg ccctaccact gtcfaatctt ctgcctaac ccccttcctc 300
 cccgatctgc tactgatgta cccaactac cactggagct tcggggagca ctctctgtc 360
 caagttgagc attgggcgcc gtccgagtag agcactgcac cccgtccaag tcnccatcta 420
 atgttgaacg ttcaattttg tcatgttgaa taatat 456

<210> 11455
 <211> 448
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-019-Q1-E1-H1

 <400> 11455

 gggtcgacac gggtcacaat gtaaatgcat acaaggatac cttccgtggg catgtgtgtg 60
 attgccctat tgtcaaagggt gtaaaattcg tgagggatgg atataccaac tgtgaaacct 120
 catgtgttgg taggtgtgag atcaacagtg gaagatgcgg gaaagaaact acgcatggga 180
 ggacactatc tgctgcacg cattaacaat ctgcatgttg caaacgtcca catggttcca 240
 cgggcgatgg tgtgaaaagc tgtgaagata ctgacgaatg caaagcgaaa tcagcctgtc 300
 agtgcagtgg ctgcagttgc gatactacat gtggaatcta taaatgcagc tgtggtggta 360
 acaacatgtt atacatgaga cagcaggaca cgtgcatcat cattcacact gcctcctcag 420
 tcggctggag cctcatgtgg gttatttt 448

<210> 11456
 <211> 390
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-H5

<400> 11456

ctcgcgggtc gacgctacac cctatagtga gtcgtaatac agcattacag ctctgaatat 60

ggattggtgg catgtggctg cggcagcctc atttaccggg caggcgtcct gtctgaagac 120

tgcgccggtc cgggtgggtga ctacagacctg ggatgtgtcc tggatgggac ctacaggtttt 180

aggagtcaag tttggttgca aggtctgtgt ggtatgatgc tcagatatta tcaattggat 240

aacagttacg acagatgtca gccaaactg tgacatgaga catactgttg tattactttg 300

tactgtcgtg tgttcacagt taatcaactg gcagcatgca tcgtccagcc ggcggtcgtc 360

ttcctttcga aggctgttta gtcaaggatt 390

<210> 11457

<211> 465

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-019-Q1-E1-H7

<400> 11457

taccggacta gaattcgcgg gtcgaccgtt tcctgaactc caaagatttc catcgtccaa 60

atatgataaa gggttcagtc aaattgccaa taaggttcac gagatgggct tgaaattcgg 120

catccattta atggaaggaa taagtacaca ggctgttaat gcgaacacac ccatcttgga 180

tattgagacg ggaaaaccct atgtagagaa tggtcggcaa tgggcagctc gtgacattgg 240

cctgacccat aaaacatgtg catggatgcc acatggattt atgagtgtaa atacggatat 300

tggagctgga cgggccttct taagatctct ttaccgacag tatgcggatt ggggtgttga 360

ttttgtgaag gttgattgta tcttcggtac tgattatagc ccggaagaag taataactgt 420

ttcacagctc ctgcgagagc ttgaccgccc aatagtacta tccat 465

<210> 11458

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-A1

<400> 11458

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gagctaataa agaggggatc taccgcagag gatttgggag cgggccatgc tgaagcagca 120
caagtgcaag gattaggttt atacaaggct cctcacaacg aggaagaacc aagctctctt 180
agtcctgacc ctctggaac ggagcctgag cagattgact ttgcacctgc aacgaagcag 240
gaagattctg aagatgatag gaaggggaaa aggcggcgcg aagagaggag aggggacaga 300
gaaaaagagc ggaggcgtga aaagcactat gagggaaaag agaggaagcg agacaagtat 360
gagagtagac acgactcgga ggacaggag aagcgccacc gcaaggataa gcagaagagg 420
aggcatgatt ctgattaacg 440

<210> 11459

<211> 323

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-A10

<400> 11459

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atgattggga acatcaattt cagccagtt ctgaggaggg caaatatagc tgattcgatg 120
tttccgatct aggtcatatt acactcgtat tagaggacag taactatgac gtgtgtcatg 180
tctcagtgcg tatgcacgat gggcatgtgg atctcactgt ctatgggaca tatttgtgct 240
gatactcgtg agtatcagtt cacagatcat ggttaaataa tttccgaaac acttgctgtg 300
aaactgggtt caatttcccg ccg 323

<210> 11460

<211> 468

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-A2

<400> 11460

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ccttccccca gctgcgggac caagccggtt atgtgaccag ctgtgtggcc accgtcgttc 120

tatgcttgtg aagagagcaa cccaagtaaa caggcttgta acttaggctc ttgctaattgt 180
 atatatagtg gttttctttt tctctccata tcaatcattt tatattgcgt acgtgtcatt 240
 gaagagtgaa atgatgggtg cttctcccg aacttact gtgtgatttg actgctcctt 300
 tagtggcccc tacacgtact cccctacgt gtatgcaaca gtcacacgta cacatagacg 360
 aaaaaaacg cacgcgacgc cctaattgat gcatgtccga gcacactagg aacacacacg 420
 gtcacgtca agtgctcaac ctacacgtgc atgcacacac atactcat 468

<210> 11461
 <211> 468
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-A3

<400> 11461

gtaccggtcc gaaattcccg agtcgacaaa tcaagggaag aaaagtctgg aggactttgc 60
 aaccttcttg gaggtgaaaa tgaggactcc attggccatc agaagtggct gagctaggac 120
 aaactgaaga tcacgaatgc agaacaagtg aaccatgact cccctactc cttgcaagat 180
 ggttgacgga agtggtggtg tcagcccggc ctcggtgctg gaccccaagt gatctccgca 240
 gccttcaaca gctatgccga tgaagttcag gagggatttc tgtgagctcg acatgtttgg 300
 cccctgaagc tatccagctc ccccttagcc ccagttttgt taaggatgaa aaagatctat 360
 aataaactat aattccctta gtttctctc ctcttagttg ctgcttgata gctctatgag 420
 catctagttg gaaaaattgc agttttatttt tgcaccttta ccttcatt 468

<210> 11462
 <211> 456
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-A4

<400> 11462

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 gtcaccgacg acgacgagga tgccgagttt gatgacatgg aggattatat cgacgacgcg 120
 gactgggacg ccgacatgta tgatgatgtg ctcgatgtct gaaggagctg tgactaggac 180

cgggtcgggt tctcacgtgg aaggaaggac gggaacttgg tgctgaaaca atgtggctct 240
 tacctgtgtt tagattcttg aagctggggt ctcttacgtt tgtaactag tctgctactc 300
 tcttgctgtg aaactggggt cgctttctct ccgcgactgt aattttatgc cgcacctgtg 360
 atttggtcat gcaataaaac cctgtaaatt aagtatcaaa aaaaaaacg ggagaaaaaa 420
 aaaaaagcg gccgctctag aggattcaag cttacg 456

<210> 11463
 <211> 458
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-020-Q1-E1-A6
 <400> 11463

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 cgagggagggc cttcgtcaac taccgcgacc tggacatcgg gcagaacgtg gttggcgaca 120
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 tccaccggct ggcgacggtg aagggccagg tggatcccga cgactacttc aggaacgagc 240
 agagcatccc accgttccta cccgtctagg ctgcaacgag tgagtgaact tctcgaaaga 300
 aaaaaaatga agtggtaacg agtgaaggct gaagagtga gagtgcggtat tgacgtgtac 360
 gccagccaac atgcatgcat ggggtgtcaca ttgtgtttgt cttgaataag gaataaagat 420
 tgggactgat tacatgtcag tggatgaagt agattttg 458

<210> 11464
 <211> 393
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-020-Q1-E1-B10
 <400> 11464

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 gcctcttacc accgtgcgca actcatcact cgtgcaatgc cgagagagcc atatcgtgac 120
 tgggtgtagtt cctcaagggtg ttccatgtgc tccaatgagc aatttgcgac agttagttca 180
 ccgatgccat gcacgccata cggcgagct aggattccat cgtgatggct gaagacagat 240

gtgacacccc aagctgacct ccggcattgc ttccatcctg gactcagcac tgtctatcgc 300
 caactctcgc ttctatctca agttctacga ttcataccgc tcagactttg gatgtgatgg 360
 atccaccttt tatacgcatac atatggcatg gag 393

<210> 11465
 <211> 456
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-020-Q1-E1-B4
 <400> 11465

cgctgcctg taccggtccg aaattcccgg gtcgactact tcacaaccga acatccgcat 60
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 cttacagagt aagaaccagc agctgcttgt tacaaggcaa agagagaact ccagagagct 180
 cgtggatcgt gagcgaagcg acgggcaacg gcgcgaggct gctctaagcg ccatgactgg 240
 gaggggatcg tgcctcttcc ccagatgccca ggaggagcag atggataggt agcttggttg 300
 tgagcgctcg aaagaaaatg gacgggcctg ggtgtttgtc gtgctgcact accctcctca 360
 tatcttgac atttccggtt gtttttgtac atataactaa taattgcccg tgcgctcaac 420
 atgaacatat aaatattcta ataataggtt atccct 456

<210> 11466
 <211> 460
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-020-Q1-E1-B7
 <400> 11466

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 tacttagatc aggtccatga ccctacccta ggtacgtgac cccatcacct ctcaaaaag 120
 gaaaaaaca aaaaaacgca tttttttcgt ttctgagagg caccgacctg actctcgcga 180
 aaaggaaaaa acagaaaacc cattttttcc gtttccgaga ggcacgaccg tgactctcgc 240
 gaaacaaaaa ccgtgcctct tgcagaagta aaaccgtgac tctcgcgaaa agaaaaaat 300
 aaaacgcatt tttcacgcat ttttttacca accatcaaaa aaatcgaaaa aaaaccgttt 360

aaaaagtcaa aaacgcgtgt gaaaaaataa aataaaaaaca aaatctggag ggagcgtcca 420
gagcgtgaca cgtggcgaat agctaagagc gcgccaagtg 460

<210> 11467
<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-C1

<400> 11467

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tacttgagat catgacagaa ttactccgg agcaacaaca tgcattctgc cagtttgtga 180
ctggtgctcc tcggcttcca cctggtgggt tagcctccct aaatcctaag ctgactatcg 240
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cagatgatga tctgcctagt gtcagtact gtgccaacta tcttaaactt ccgccatact 360
cgacaaagga ggttatgcac aagaagctgc tttatgctat caacgaaggc caggggtcgt 420
ttgatctttc atagtgggtt caaaactaac atacagatgg ttggtgcaca atgtaa 476

<210> 11468
<211> 384
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-C11

<400> 11468

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gagctggagt cgggtccggt gcacgtgtac agcttctcgg ggggtgttct catctgcggc 180
gtggcgtgcc tcgtcgcgct cggcatacac accgggatcc tctttcacia gtactgcgag 240
caacggcggc agatgtccgc cgacggcagc tcccgtcta gccgcagcag tttccgagcg 300
ttctgtcgg ttgccgaccg aacggagatt gggaccaca tatcctgcat cgacaaggca 360
cgaggagatc actccattag cgcg 384

<210> 11469
 <211> 476
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-020-Q1-E1-C2

 <400> 11469

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 gtcgatcgac tcaatttggg agggaagaat tttttttagg gaaatttggg aaagactagc 180
 aaaaaggccc gtgcgttgca acgggagaaa ataaatgaca cccaatcca atatgcatag 240
 cgatgggaat gtgtgtcgag gaataacatg aaggagaatt gtgatttcag ctagccaacc 300
 ttgcaaaac ggcttagaaa tgaatgcatt cttcaatttg tggattaagt taaagatata 360
 agcatctcct ataagattta aaaaaaatc aagcataaga ataaaaatac atatagaaca 420
 ttaaaaaata aaatcaaaac tgaaacataa tttcttctgc caaaggaaga tgacat 476

<210> 11470
 <211> 473
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-020-Q1-E1-C3

 <400> 11470

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 caaacgtctg ccgatgcctc tgtgttgggc gaagggcgta caacagcggc ggcagaggtg 180
 aaggctgcag atgaaaagta tgggaaaaaa gggctaagtg gaaggaaatg ggaccgtgag 240
 gggggattgg gtgggccggg gtgtcgaagt cttacgtgtc tgctgtccga actcccgcaa 300
 agtccctc actttgtctt caatttgcgg gagatagtgc gtaccgccg acgaagcgat 360
 ataggcccg gttggataac ttccgcggc tttacagtgc ggccaggacg gcttgaaggt 420
 cggcgtagga gatttcgttc gaacttact cctccgtccc ataataaag tgg 473

<210> 11471

<211> 477
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-C4

<400> 11471

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tttggtcgtc gctgtcgtgg agatggggac agaaagtgga agagggtggag cgcaagtttg 180
tttcgattgg gtttgtgcat attctcatcg gtgcttggag tggagctacg gcgcccactg 240
gagctgccgg tctccgaacg ctccccgggtg acctttctgg ccgaagggcg gcctggtgaa 300
gccgcttcgt ttcttcctcc tggcttgatg ccatttgaga ggcagctggt caacttcaac 360
atggagtcct cttcttccat ctttgtccgg agatggagta gtggcgggtcc tgtgatccca 420
agtggtcacg tccccgggtga tggccggact ggatctacgc tgggagtgag tattgga 477

<210> 11472
<211> 469
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-C6

<400> 11472

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ggccatggcg tcatagccgc cggccgccgg gaagccggcc atggcgtgtg gagaggagag 180
gaggtgggag gaggccgtgg tggaggggat ctggatcggg gcctcgggtg attttttttg 240
agataaacgg gggtgggttg acaatggagt gggacattga tggcatggga gtatactagt 300
agcgcggctg cctctcctgc gctacagcta tccacatagt agtagcggcg gtttcccgcg 360
ctactactat ggtctgttcg cgggtcatgg ttggagatat ttactagtag aatgtttttt 420
gtaccacacg ctaccagtaa atattactag tagcgggtgt caacatagc 469

<210> 11473
<211> 452
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-C7

<400> 11473

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caggtgcgtt gccggtgcaa gtggagatcc atgccgcggt gacaggcgct gtgacggcgt  180
catccacagc gagatgccct gtgtggtcct ggtgctgcga aggcaaagtt catggcaaga  240
ggtttgcagg tgatctgcat caagattaga ggagttgaca tgacaagatt agggaggtga  300
atgttaggat taatcttgtc tagccgagct gagagagtca gttagtttgt tagctgctgtg  360
agggtcgtgt gcctagagtg attctaggag gaagaagtgg tcaagataag attagatggg  420
tgcattgtgaa gtggcgtgag tgggtcagtt tg                                     452
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<210> 11474

<211> 472

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-020-Q1-E1-C8

<400> 11474

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ccaaaatecc tcaggacggt ctggcagcac cgcattcatc tcacaagtgg cagtcgggtg  120
tagatctgtc tgactacacc atcatgcact gcctcttgct tcgccgccct tgetgtattg  180
taggaccata gtgcaccacc cgcgcgtccg agcggagaac cacctaacgg atatggagat  240
ggttgccgcc ggtgaacctc agatcacggg atcgtagctc cgacataacc tgatctttga  300
caagtatgtc gtcggagtca caacacgcac cagggaggta ctccagggca aactactac  360
acgtgtgcac catatcgagt cncctccctc ttccagcgca cgggaatccc atcgtgtgag  420
cgcggcggac gaccttcgcg tccgtctcgt cggcacgcga gcatcccgt ga          472
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<210> 11475

<211> 471

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-C9

<400> 11475

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cgggacaccc tcgcctctat caagaggtat cagttttcag gttgctcggg gagaatttcc 120
agtttcccct agattagatt tattttctta cctattgtcc aagaaaaagc cacaaaaaag 180
ttagatctat tcatcctttt gtccaagcca gtctgagcct ttgcaatttt ctattcattg 240
tttgcatat tgaattatcg gttgcatcgt cgtgtcgagt tgctgggtctt aggggtctagt 300
tcgttttagag tttcgagttc tgttcacatt agtcacgtcg ccgctgcacg gttatccctt 360
ctgctgtcca ccacaccatc catcaaattc caccatgtgc taccatagtg tcattggcac 420
aatcataggt gaggtcggtc acatcttcgc ctgattcaat ctgcatctta t 471

<210> 11476

<211> 464

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-D1

<400> 11476

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gagggcgagg gcccggtgaga agttttcggg ttgctcttgg gtgtccaatg cttatgtggg 180
agtgggtctag acgcccgaaa gcccccttga tttgcgttcg gtttatggaa aaacggacaa 240
ccggaccgct cgggtccacga ttgcggacga ttaagggtt caggttgaag atgccctaag 300
catcgatcta ttagttgtac tcatgaacct ttgttcaaaa catacatatg agaaggactt 360
gcaaagaaaa aacataaaac ggtcaattgg acaatgaaca tcgcttttta aggccgtcta 420
caacgctggc cacttgacca gccgcttatg gagagaaatt caat 464

<210> 11477

<211> 470

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-020-Q1-E1-D3

<400> 11477

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gttgagttg tgtacaacct catcatgaat gagcttttca cagctgttcg tggaaaaggt 180
gctttttctca atggtttctcc aattaaaaca tcgcctcaaa atgagttggt gaaggctctt 240
atggtgacag aggtagggac caaaagagac aagtccactt tggatgatac aaccaacaga 300
attaataagt tactattcaa gattagatct atacgtatgt gtggctcttt ggctctaaac 360
atgtgtggag ttgcttgtgg taggctagat ttgtgttatg agatcggttt tgggtggcccc 420
tgggatgtgg ctgctggagc tttgattcta aaggaagctg ggggttttgt 470

<210> 11478

<211> 471

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-D4

<400> 11478

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cggtagagatt ttacagtttt tcgtagttta gatcgagtct gttcttcata cctattgtcc 180
acgaaaaagc caaaaaaaaa ttagggtttag ttcattccat ccgaaccaat ctgagccttg 240
cataatcttt tctgtatttg cttcgttgaa tttgcggttg catcgctgtg ttcagttgct 300
ggctcttagcg tctagtcttt tagagtttcg agttctgttc acaagttgtc acgccatcgc 360
cgcaccatca tcatcgcccc tgccatctac caccaccaat ccgagttcct tgcttattag 420
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<210> 11479

<211> 451

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-D6

<400> 11479

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atgtttatat ccgaaaacaa cgatatTTaa gccttgcatt agtcccaata taaattatTT 120

gacaaaagaa aacaaaaatt taaaaacaaa gcataaagtt taaaaaagtt cattgatttt 180

gaaaggaaaag ttcacaattg ttttgTTaaa tgttactaaa aacaaaacaa tcatcattcc 240

tagaaaaata tgaaaaaaa tcatggattt ggaaaaagtt catcgatgTT gataaaaaaa 300

tttacgaatt tgaaaaaggt tccccggatt ttaaagaaaa accacaaatt tgaaaaaggt 360

tcaccgattt tgatacaaaa gttcataaat tttaaatagt ttgtagagtt gaaaaaatgg 420

ttcacggatt ttcaacaaag attatgaatt c 451

<210> 11480

<211> 456

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-D8

<400> 11480

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cagagcatta cTTTTtgggg gattgggtgc cacaatggTT tccatggaaa gaagTTTTcc 120

TTTTaccgt gcagtggcat gctTTagccc ttggTTtgTT tgcatcgata atagcaccat 180

ttggaggatt tttcgcaagt ggcttcaaga gggctTTTaa aataaaggat tttggcgaca 240

gtatacctgg acatggTgga attactgacc gaatggattg tcaaatggTc atggcagtct 300

ttgcatacat atatcaccaa tctTTtatct cGccccacaa tttctctgTT gacacaatct 360

tggatcagat tgtaagaaac ctaacctatg aggagcagaa atccttatac cagcaactag 420

gagagatctt ccgtgaaagg cagTTtatgc aaagct 456

<210> 11481

<211> 456

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-E1

<400> 11481

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 tgccgggtcg aaccggagac ttcatctgtg gcaccggaac tctggcttgg ctgtggctgg 180
 attagcagca gacggtaggc agatagtctc aagagcaaag tcagaagcag ccaattatga 240
 aaaggatatac ggagaaccca tgcctgtaaa ggaattagct gatcgcggtg ctagctatgt 300
 tcatctgtgt acactctact ggtggctcag gccttttggc tgtggagtta ttcttgagg 360
 ctatgatagg gatgggccac agctctacat gatcgaaact tcaggcctct cctataaata 420
 ttttggtgct gctctgggta aaggaagaca agctgc 456

<210> 11482
 <211> 462
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-E3

<400> 11482

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 tttaaaggt cagccggcgt cgaggtagcc caaagatctt ggaaccgagc agggaggaca 180
 gtgcctaggc gcagccatat ggatgcagcc cttgggcaag caatgaacaa atgctgtgtg 240
 ccctctgaag tggcattaca tcgtgggcaa gctgtggcgg ttgcaatgtg cttatcaaag 300
 aggttgtccc tgggtgttag ccgacctcta aacaagagcc aagcaaagat cttcagcttg 360
 tttggacagc ggctgcgcca aataagatcc gcatggtcac actcatcttc ctcatgcata 420
 ataataccct tggagctttt gaggaatttt ttgccatgta tg 462

<210> 11483
 <211> 446
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-020-Q1-E1-E6

<400> 11483

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gaaatagatg aactcccatg tttcacatag attattttga gagtcattaa tagcatggta 180
attcgcttaa tgttaataata cttggtattc aaggatatgtg aaactttctt ttgagtgcgt 240
tgaatactaa gataagtttg atgcttgata attgttttga gatatggagg tgataatatt 300
agagtcatgc tagttgagta gttgtgaatt taaagaatac ttgtgttgaa gtttgtgatt 360
cncgtagcat gcacgtatgg tgaaccgtta tgtgatgaag tcggagcatg atttatttat 420
tgattgtctt ccttatgagt ggtgggt 446

<210> 11484
<211> 461
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-020-Q1-E1-E8
<400> 11484

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gcctcgctcg acggcgctgc cggccggcga tggatatgga gaggagctcg ggtcttcctt 120
gtgtatatta gggcagcagt agtttttaggt tgtcttggtt tcatgccgtg gtctggcggt 180
atgccgtggg gatgcaaacc actggagctc tcgagcggcg tctgggtggg gcctccgctg 240
ttttctttct tgccaccatg gtgggtggaa gtggaagacg ccgatcttg caagatcccc 300
ttggataagc tcgttctggt gttgtgggtg tcctgatct ggagggcatc caactgctac 360
tgcttgtttt ctgaggctac catggtgggt gatgagaagc aagatagttg cagaatctg 420
aagtttatag gtcgagttcg agcatatcag cacacgtccc t 461

<210> 11485
<211> 474
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-020-Q1-E1-F1
<400> 11485

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tgatagcatg atataattca catacatgat gattggctaa acagcatgac attgcataat 120
 tcacatatat aatgcctttg caacaagata gcaactgtata attcacatat ataatgtctt 180
 gcaacaagat ggcaatgcat aattcacata tatggtaatt agacactaaa catgtggcat 240
 tcacacaaag catgtctaaa ctaatcaaat ggcatagcaa tgcgagacac catacgcgcg 300
 atatgagcaa cataaccctg ccaagttaga gcatacacct aggggggggaa tangactagt 360
 catctgtctc tgaatcctcc tctgaggagc tatctgtaac cagcgagata tgcgcttcgt 420
 cagatagcat agtctgtctc gaagaccttt tttcactcca gaatttgcca tcac 474

<210> 11486
 <211> 476
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-020-Q1-E1-F2
 <400> 11486

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 atcatctcct ccattgagca gaaggaggag agccgtggca atgaggaccg ggtcacgctc 180
 atcaaggaat accgtggcaa gatcgaaact gagctcagca agatctgtga tggcatcctc 240
 aagctgctcg aaaccacact tgtcccgtcc tccactgccc ctgagtccaa ggtcttctat 300
 ctttaagatga agggtgacta ctacaggtat cttgcggaat tcaagagtgg gcctgagagg 360
 aaggatgctg ctgagaatac catgggtggca tacaaggctg ctcaggatat tgctttggct 420
 gagctggctc caactcatcc gattaggctt gggctggcac taaacttctc ggtggt 476

<210> 11487
 <211> 479
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-020-Q1-E1-F3
 <400> 11487

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ttacatatct gatatagata gcaaatagga ggcattcaca caaagcatgt ctaatctaag 180
cagatggcat gtcaatgcaa gacaccatat gcatgatatg agcaaaataa cctggccaag 240
ttagatcatg caccttgggg ggatatgact ggtcatctgt ctctgaatcc tcccctgagg 300
agctatcttt aaccaacaag aaatctgcat cgacaggtgc actgactgct cagaagacct 360
tgttttcact ccagattttc ccatgatcga ctcaaattggc tgatgcaaag gaagagtaga 420
tgaatgtata aacattgttg acaaattggaa tacattatta aaaaaaatg gcacgatac 479

<210> 11488
<211> 386
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-F4

<400> 11488
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aatggtggcc agtctgatgt cagagatcat actggtaaca accaggtaat gaaaccttgg 180
aaaccagtg gaattaacaa gtcaattact acatagatgg ggctgatgag gtcagcttct 240
tgaatataac tggtttccgt gcctttccat tgggtgatat gccaatgcta catgtgctac 300
gttacgcac tcagaaagtt tttgtgccac ttacagttgg tggccgtaac atacacttca 360
catatcacac tggccgatac cattca 386

<210> 11489
<211> 459
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-F5

<400> 11489
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gaatatttag caaaaagcaa tgctaattag ttatttcaga tgtgcgattg ttgctgaaca 180
ttaagacaaa agaagtagaa taactaacca atcattaaag ttaaagtgga atatttagca 240

aagtagtgaa cccgttgcg ccaatgacgc atagacccgc taaatccaag tccgaactaa 300
aaagaaaacc catgatttag ttagtttaat tatgggcaag cacatatagt aacaaactga 360
acactcttta taataataat aataaagaac gcttgcttgt tctgtacaat acgatgtaca 420
cacacattta aatttggcaa cacaaagttt caatgaaaa 459

<210> 11490
<211> 456
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-020-Q1-E1-F6

<400> 11490

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ctgaaaaaca tggcattgca taattcacat atctgatata gaaagcaaac aggaggcatt 180
cacacaaagc atgtctaate taagcagatg gcatggcaat gcaagacaca atatgcatga 240
tatgagcaat ataaccctgc caagtttagag catgcacctc gggggggggg gggtagcact 300
ggatcatctgt ctctgaatcc tctctgggg agctatttgt aaccagtaag aaatctgcat 360
cgacaggtag caccgactgc tcagaagacc ttgttttcac tccagatttt cccatgactg 420
acttaatggc tgatgcacag gaagagtana tgaatg 456

<210> 11491
<211> 469
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-F7

<400> 11491

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tcatgtgccg gctcatggct gctccgggag agactggcgc ccagctgcgc agacaaattt 120
caagcagcaa ggaagtaate cacggcatgg aggaaattct caagtgttgc ggatgcgggtg 180
aacaagttcg catattaacc attgagattc tcacgcagct acccgtgggc ttgggtgagg 240
agtttccgtg tgggaacaag gaaagcagag aaaattttat caagatgctt ccttctatct 300

tcaactgatga ggccaaagag caccatca gaaaattggc tggatgaagca ctgctgaagc 360
 taagtcaaag cgaaaccaat gctgccatca tcttgaaggc aaatgatcat cttgtccgtg 420
 atctccgtaa aatcctacta gatgctgcgg ccaagggcac aaatcgaat 469

<210> 11492
 <211> 449
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-G12

<400> 11492

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 tttgtgctag ccactttatg gcaacttggt taacttatgt ctgtactcag atattgttgc 180
 ttctgctgac tctgtatga tcgagcactt gtattcgagc cctcgaggcc cctggcttgt 240
 attatgatgc ttgtatgact tattttatct gtagagttgt gttgtgatat cttcccgtga 300
 gtccctgatc ttgatcgatc acatttgcgt gcatgattag tgtacgattg aatcgggggc 360
 gtcacaaatt tgttgcttga taattgtttt gagatataaa ggtaataatg ttaggggtcat 420
 gccagtgggt aattatgaaa ttgagaaat 449

<210> 11493
 <211> 461
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-G2

<400> 11493

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 attgtcacat tatatttctt cttctatctt agctatgaag taatgaacac atgtgtgttg 180
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 ggccagcagg ctaaactctt ttgactgata agctcttcac tgctaggtac agagtttata 300
 gtttaactgaa atcggatagc aaagaacgca gggtcagttt tgacttatgc tatggtttgc 360

tgcagtgtgg tatccgagcc agcgtcaggt gcgccaagct cgccgtccac acgcctcctc 420
 ttcattctgca tccgcagtgc caaatccctc cccatccgag c 461

<210> 11494
 <211> 473
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-G3

<400> 11494

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 tcgactagag ggggggtgaat aggcgatttt catgaattct tctaagga atttgctggt 180
 gaggaattc ctacgtgaag aactactctc aacggaataa gtactcaca gtaaacataa 240
 cagaacataa gcatagtcatt catgatgaaa tgaagacaag cacagagtac agaaaacata 300
 aacacaggat aacacaagaa agaagatgga caggttgaag aaattgaact ggggaaattg 360
 agaaagtctt cagtcaaagt cttcaaacgg atatgaacag gcacacaaca acagacatga 420
 ggaaatgaaa gagttgagga aatagaacta gtaagctcgg tgaagacaat gat 473

<210> 11495
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-G8

<400> 11495

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 ctctatgacc ggtggtcatt ttgttttggt tgatcacaca tttgtaaggc taaacttggt 180
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 aagacgcgtt tataccagat ctgctagaga tgctctgcct ccaaaccgga caagtaggaa 420

tttttgtgat taaggattga atggc

445

<210> 11496
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-G9

<400> 11496

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gctcgtagcg caggaagaac tggcgtctcg atggagctcg tatgccagga agaactggcg 180
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agctcgcggt tctgttttgg cggcgtgcgc tcgctgttgg atggagctcg tacgccagga 360
agaactggcg tctcgatgga actcgtagcg caggaaaggc tggcgtttgt ttggacct 418

<210> 11497
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-H1

<400> 11497

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cgctcgtcc gacggcgctg ccggccggcg atggatatgg agaggagctc gggctcttct 120
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cttgaataag ctcgttctgg tgttgtgggt ttccctgacg tggagggcat ccaactgcta 360
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<210> 11498
 <211> 465
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-H3

<400> 11498

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gttcgaaaag tcattttctga ggctgatggg taccagcccc atttgattgc tcctgagcaa 180
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gaattaaagc gtttcccaac gcttcaatca gatatagctg cagcagcaaa tgaaagccta 360
gaaagattcc gtgaggatgg acgaaagaca gttattcgct tagttgacat ggaggccagt 420
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<210> 11499
 <211> 452
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-020-Q1-E1-H6

<400> 11499

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ttttctgcct acaacatggc ccaaagtcga gaatgcccc aaagactttc tatgtcgttt 180
tttagcaaga caccttttta cttcgcataa gtcattacta cgtgtatatg tagtgaatca 240
cttcacatt ttgaattttt ttataagatc aacctgcccg ccgttattac tcaaaagggtg 300
tgtggaggta ctcttacaac gcagatcata agatacaaca tgggccgaga ataagcctaa 360
cacctcgttg aggccaacc gacgatgggt gaacttact acaacacacc aatgatggcg 420
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<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-020-Q1-E1-H7

 <400> 11500

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 gcgcttggaa tgcggagctg ctccgcccct tttaacttta agttttcagg ctgttgagat 300
 gtaataagaa ataccttcta gtttgattat taaagacaca gttttttgtt gcaatctcat 360
 aatgattgt tgttcctttt ttagtctcta aatccccag tgggtggctt agccgcgaaa 420
 ccgtttcgcc taagttcgaa aaatcctacc gagtggtgag caggcctctc a 471

<210> 11501
 <211> 462
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-020-Q1-E1-H8

 <400> 11501

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 tctctccat tgagcagaag gaggagagcc gtggcaacga ggaccgggtc acgctcatca 180
 aggagtaccg tggcaagatc gagactgagc ttagcaagat ctgtgatggc atcctcaagc 240
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<210> 11502
 <211> 380
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-A11

<400> 11502

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tacgggacca gaagagaaga aagtagaggc atccacccaa gaggataatg ctgaagcagt 240
tgccgcagag ccagaatctg ctagagccca ggaaaatgcg gaagcttcta ctcagcctag 300
tcctatggag atagagtcag ttcaagaaac agctatgctg ggagaagctg aaaccaggca 360
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<210> 11503

<211> 354

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-021-Q1-E2-A3

<400> 11503

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tgggggttgg ttacctacc tccaacacca tttgtgaagg agccggatcc cctgacgtac 240
gggcacctga cattggacca ctgacgcgtg ggtctggatc cacacgtcag cgagtgcgcc 300
gtacgtcaga ggagctgcgt ccatttgtga agctcactct tgcanggaat aaaa 354

<210> 11504

<211> 383

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-021-Q1-E2-A4

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gttcattcca gtgtcacctg tgaaccctcc agagacgcga gatgttcccc gccattggaa 120
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 cattccccggg gccatggagg catcacgatg ggctggcaat ngacatgtct ccatttagcg 240
 gtccaaggac ctggtcattg tcaacgacac accgtgtgca ttgtgcaccc tatgcttggg 300
 tccatactga ccggatgaca taactctcat gatcaccact cgtagtagtg gcctgatcat 360
 catgatcctg aatcgtagag cag 383

<210> 11505
 <211> 404
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-A6

<400> 11505

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 tgaagcaatc aaggacggat cgcactagat tctgcatgtc gggtagtaac tgtcaccata 180
 aggaaaaaca gatctgcgat cgtaggcgaa cactgatcag gaccatagga ggtctacaaa 240
 tacgggaggg cacgtgttca aattggttag catcgaagga gttaaagtga agcgtcaata 300
 ccaatcatcg gatgctacat cgctgacat gtcaatggaa tgacagtcgg acgaccggta 360
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<210> 11506
 <211> 383
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-A9

<400> 11506

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 tggcaatttg ggcggttaact ctgcgcgaaa ttcttgccgg tcgtgcacgt cttgtgtcca 180
 agacaagtgc gttggctcag taaatcgat agttgttagc gcatgtataa tcatgtttct 240

ataaatgttt cagtaggggtt ctcgttcact ctaatgttgt aaaactcaga catactttga 300
 gtttataaga catctaattgt ttgtatatat aaaaggcctg atgggaatgg ggaaaaacct 360
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<210> 11507
 <211> 445
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 <213> Triticum aestivum
 <223> unsure at all n locations
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 <400> 11507

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 tgattttaac tggactattg naatgcagcc agcgaagatg gaaatagaca ccgctgtcat 180
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 gatgtaccag atcaacgacg tcattgggat cgatagctgc tctgaccctg atcaaagatc 300
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<210> 11508
 <211> 441
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-021-Q1-E2-B12
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 agatcgagct cgctaaacca actgtgaacc aaggatga acacgaagag cttcatcact 180
 ccggtgaacg agctgaatcc aacaatcctg cgactaccaa ttctactgac gcaccgactg 240
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cgctgatca catcagcatc tgattatcaa gatccatctg ttgcgataac atgcagactt 360
catctatcgt gcaagcctaa gcctgactct agggtagctt gaggatgata catgtatggg 420
tacagtacat atccaaactg c 441

<210> 11509
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-B2

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cgacattact gttctcacag atccggtgat ggtcaaaaca aatggttggt ttttcatcac 180
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taacaatttt agatgagtat atactatatg atttttggta gcaacgaata cattcaatca 300
gtttggctag cggaacagcg taatagatta tgtctacggg tcatctaata ttgcacgctg 360
atgtgcggcg cttatgcgaa cactgcatca tgggtcgcct acacgtcgcc gtttcatgaa 420
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<210> 11510
<211> 400
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
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<400> 11510

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ttgagctgat cttgtcagag aaggaagagc ctgtgaagaa ggaggctgac aacgtcgtcg 180
caccaaggaa agctatctaa gctaacggag tggctgcatt cgtccaagaa tcttagttgt 240
agttcttctc aagtatcttt gttggcagtg tttgttgctt ccttgatggt tttgttacca 300
acatggagta aggatttggt aaggttgatg ctatccttgt gatcgcgagt ggtctttata 360

tgctaaaaca gtttcagata tttgagcatt agcccatcag

400

<210> 11511

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-C6

<400> 11511

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tcacagtcag aatgcccaca cctgtgtgta tcgccaccat ctctatttga cagataagct 180
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agtcgaacta ctgtggcttc acttgtcgaa gcctgtacca ttgtggaacc gctactcaac 360
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<210> 11512

<211> 441

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-C7

<400> 11512

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tactgcacgc ctcacattga ccagctcttc aagaggaccg ggagcctgga caagagcttc 180
aattgcactc caaaggttgt caagccagaa aggaatgttg ggaatgagaa tgctactaga 240
gtctccagcg catttgctgg cactagagag aaatgttttg gatgcagcaa gacagtctat 300
ccaattgaga gggttactgt gaataacact atgtaccaca agagctgctt caaatgctgc 360
catggagggt gcaccatcag cccttcgaat tacatccgc acgaaggcaa gctcttctgc 420
aaacagcacc aaaaccagct g 441

<210> 11513
 <211> 419
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-C8

<400> 11513

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 ggtctgtttc aggtgttgga cctgtcaaac actaattcac agttgtcagg taagtaatcg 180
 taaccagatg gctcatgtga cgatgatgcc aagtgcataa aagagcactt gtctgggggt 240
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 cctttacagc ttcccatgcc aatggcgatc atattacact gactgatctg ggatgtgtct 360
 gacgctacaa ccatatgtgg catgcagtaa agttccattt aaccagttgg agattcacc 419

<210> 11514
 <211> 378
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-D7

<400> 11514

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 atatcatcat gcctcacaac gactcgctta aatttctggc ttatgctcac gatttaatca 180
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 tggcagtggt tcatcttcat ccttaatcca tctggcttat cattttcaaa aggatcctga 300
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 acatcatggt gtaattgc 378

<210> 11515
 <211> 386
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-E10

<400> 11515

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tctttcgagc atctggcatg ggattcagtg tggagtttta gcgttttgga cctcctcgct 240
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<210> 11516

<211> 411

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-E5

<400> 11516

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<210> 11517

<211> 345

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-E7

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 catcttggtt ggctgtttat cactgtgcgg tccctattag tcatcgaata tcgacgtggt 240
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<210> 11518
 <211> 425
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-F10

<400> 11518

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<210> 11519
 <211> 416
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-F2

<400> 11519

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<210> 11520
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-F9

<400> 11520

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<210> 11521
<211> 465
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-G5

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gctggacggg ccttcttaag atctctttac cgacagtatg cggattgggg tggtgatttt 360
gtgaagggtg attgtatctt cgggtactgat tatagcccgg aagaagtaat aactatttcg 420

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465

<210> 11522

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-G8

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<210> 11523

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-021-Q1-E2-H7

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tttagccgat ggaagtttct taaacatcac tttttgtcgc ccctgttggt actggagctc 300
aggttggagg tgaacccaaa ggttgagtga ttcagtcgat ggaagtttct taaacagcaa 360
cctttggcat ttgaccctaa gctatgattt tttgtcattc ggcttgatgt gtatttccta 420
ttacctcggt gatatagttt ttgatctg 448

<210> 11524
 <211> 435
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-A1

<400> 11524

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gctctgcctc ccccgccgctc ggcgccagcc cccccgtct tcggtggcct tagggccatg 120
ggagcagatc tcagcccttg tcggttggac gactctgttt ttagatatgt ttccgagttt 180
tgttatggtt tgtgtcctac acgggaaggt gagacgacgg cggctccctg aagatggaat 240
atacgtctcc ccgtctagtc cctgtgccgt tgctgcacat actattgtct gtgggcgtgt 300
ggatgtgtgt cttcaacgaa tctgtctttg atggatttgc tcggatctgt tcatcattcg 360
tctatattct tgtgtcttta ggttgggtcc ttctgatcta cactcttcac ccacgatggg 420
ggccggttctg gtgca 435
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<210> 11525
 <211> 425
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-A10

<400> 11525

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actgggtgac gattgatggg caaagcgttg gtgcctggat caacctcgtg aagcaactcc 120
acatggagat ctcaaggcga acacttgcca tgtcttcggc aggtgaagaa tagggcagct 180
gcagctgcta ccgcgcttta tttttattct ttggaggctg ttgggtctcc ggccgggtgt 240
atctactcga tagcttttgt gccatatgct gttttgtaat tgttatatgt acgcacctt 300
tttggtttgg gttgtaatta atttgtttat catgtagtat atgtttttgt atgtttttatc 360
atgtgctaaa tatctatttt tacgtgcttt gctattaaaa aagaagaaga ggggaaggaa 420
gagag 425
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<210> 11526
 <211> 431

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-A6
 <400> 11526
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 tcttagccct tgtcgcaagt cctcgagatg gggcgacagg gtcacatatt tcgtgagtct 180
 ctgcttggtta ccgcgtgttc ctaatccact acattctgga tatttgatcc gaggggcctc 240
 tggcctgata gcactaacca tcacgtgggc atagtatggg cgttttgctg catatacatc 300
 agccaaagct taatcgacct cagcgactga gcggcgcgcg cagggttgga ctgcgtaagc 360
 tctgccttg ttaaggagg tagttaggtc tgctcaccgg ccgcgtatgt aacgtgtacg 420
 agttccccgg g 431

<210> 11527
 <211> 400
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-B11
 <400> 11527
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 accttttcgc ttcgacctct ggacctata gtccggagtg tgtccgaata ccctctcggt 120
 tatgtaagaa ctggggcatg catggagaca aggcataagg gtcataagtg ctttatcaga 180
 caagtgccca actagttatg ttatattaca tggtagtaa gaaacatctt ccagagagaa 240
 tagttccgtt aggggttcct tttcctggga ggcattgccct aagggtgcatg tccgaactgt 300
 cggaaagagc agaaaagcat ctggggggcaa ataaatgaat acgaaagatc atcttttagt 360
 tcaccgaccg aatattccct taagaacgct agctttcggc 400

<210> 11528
 <211> 376
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-B12

<400> 11528

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ctaaactgac aatgcccgtc ttactgccc tcttggtgat ggccctgttg atcactgcat 120
catcttcagg agaagtttca acgacagaac gtgataagga tgccctccaaa gtgacatagg 180
gtcacacttc tctttaccat cttcagatgc acagccacag caggatgagg attctgacag 240
atcttctgga ctacgactac ggaggagcca actccataca cgatccacac aggaggcccc 300
ggaatggggg acattaggca ctagataata gctagctctc gcaaccattc aagatagtcc 360
cgtgttttgg actggg 376

<210> 11529

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-B5

<400> 11529

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gtcttgagaa ggaagaggaa gattatttca atgagagtga cgaggaagat tcagtaaggc 180
ggactaaaca tgcacacagt gaacataatg aagaaagcaa ggatgatgta gccaatggaa 240
gcgaaactgg tgacatatcc tcaaggccta aatctggtgg gcttgtggac tatgccgatg 300
atgatgacga tgatttcaat ccgccacca aggagcctga taggcctgtg gatgacgatg 360
acctcttaac tatatccaca gtgaatcggg aattagttaa cacgggggat ggaaaacatg 420
cagatgggg 429

<210> 11530

<211> 272

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-022-Q1-E1-B6

<400> 11530

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 ggtggttgcc aaatattaca agggtaatta tgggtgcagca aacacaattt tacaaaatac 120
 ctaaagtacc tacactaact ttaacatgaa agggaaaaca cataaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa agcggccgct ctaaaagatc caaacttacg tacacatgca aacaacgata 240
 tancaccaca atagaaacac cttaattcaa tt 272

<210> 11531
 <211> 76
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-C1

<400> 11531

tactgagtcg tattaacact tacgtcagcc tgcattgctc ttcatcactc ttcaacactg 60
 tcaaccacct tcagct 76

<210> 11532
 <211> 428
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-C11

<400> 11532

gtgggtcgac gcgattccct agagtgcgac gtattattcc aaggagcttg taagcaagag 60
 agtgagaggt gtcttctcct tcttctcct cttcttcttc atggagagaa acataagaaa 120
 accattagtc tcatcatctt atggagctga gtattgtccc ataactattg ttgcatgatt 180
 tagcatacta taaatgttaa tcaggccatt aaatttgcatt tgcattggtc cccttaaaga 240
 attgcatttt ttcatgtatt gcttattggt gtttagcagga taaatatgtg tattttataa 300
 cactgttgca ggactgatga gaatttggtt ggcttttttc ttgcaccggc aacatcatct 360
 ctacatctga tgttttaggt gtgttagtaa tgagtaataa gaaagtgtgg caaataatcg 420
 ctgaacag 428

<210> 11533
 <211> 415
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-C12

<400> 11533

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gcgtagtcca tcacaacacc ctatagttag tcgtattacg cgaaccctgg ctggtgcatt   60
gccaaagccg tggggatatct gattctcggg gctaccattt gtgccgcatt tgcagaccgg   120
ctcgttgatg cagtccacaa cgtctcaaac gccacacaca tcccgtcctt cgttgctcgg   180
ttcatcggcc tcccagcagg gaaccaattc cagcgagggt gtctcggcca tcattctcgc   240
cagcatgaag aagcacatga cttgctccct tactttctcg gatgtatacg gcagtgtgac   300
catgaacagc aactgtgcc tgggcgtgtt cttagcgctc atctacttca gggagctgac   360
gtgggacgtc tgggcggaag tgctcgtcat cctgcatatc tgtgtcaata tgggg      415

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<210> 11534

<211> 316

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-C5

<400> 11534

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gtgcggggagg ccatcgagggt gggcacaatg tatcaaggcg cgccctgatg tgctgtgctc   120
cgcggtggggc tcacctctgg ctagtccttg gacctcaaga tctctgctac tccaaacttt   180
atgcgcctaaa gattttgctg cgtttgact ccttttggtg atgatatgca acgaagtttg   240
ctcaaaacgt accactacat ctggcactgg gcactatatc tctagggttag tcacaggtat   300
gttgtaaagt tggcta      316

```

<210> 11535

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-C6

<400> 11535

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actacttcaa gaagcttctc aaaggggcag tgctgacaac atcactgtcg tcattgttcg 120
 cttcttggac ggaacgacga cgtctgctgg agatggaccg ggcgaggagg ttgccaagga 180
 ccaaagtgag gaggtcgcca aggaccaatc ttcatagttc ttgttcctcc acggcgttgt 240
 atccgctggt gtatctgatg ctcaaagtag atgtcatgtg gcggcgccct cccgtgctgc 300
 gaaaccgaaa ctgacttggc ctgagtttcg tcgttggttc atgctcccgg ctatcctaga 360
 tggtaggtaa tgtcggaaca caggggggatg gtggggcagt gttgttacca tatg 414

<210> 11536
 <211> 450
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-C9

<400> 11536

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 gcggtctgcc gtgcagaaga gggaagcaat tggcgaagaa gtggctcgac tgttgacagc 120
 agagttcatc cgtgaaatct accactccga gtggtagacc aatgtagtca tggttcctaa 180
 gaaggataat tcaactcgta tgtgcattta tttcaagcat atcaatcggg cctgcccga 240
 agatcacttc cctctccctc gcactgatca gattgttgac tcaactgtgg gatgtgagcg 300
 cttgtctttc ttagatgcat attccggata ccaccagatc cgactgtatg gtcccgatga 360
 aataaaaaca gccttcctcg cccattcggg gtgcttttgc tatgtcacca tgccttttgg 420
 tctgaaaaat gccagagcca cattcatgag 450

<210> 11537
 <211> 389
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-D5

<400> 11537

taccctatag tgagtcgtat tacgtgcgcc tcgtcaagcg ctgccacaag cccgaccgag 60
 aggaattcac cacggtggcc agtcagacgg ccacggggtt cgtcgtcatg ggcttcgtcg 120
 ggttcttcgt caagctcatc atcatcccca tcagaattat catcgtcagg tccggctgat 180

ctcatctcgc tacgtgaggg gccgcaggac gacacgaagg ttccattca tggatgcagc 240
gctggttttc ttagccccgt aacctaaagtc aattcaatta cgacttcatt gtacaggaca 300
gttcccttgt gttttcactt gacacagttg tattggtaga cctggagcac ttttgaacct 360
gattccggct agaccgttgt atcaagcag 389

<210> 11538
<211> 363
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-022-Q1-E1-E4
<400> 11538

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caaggggtat gatgtgcacg cgtgtgttca tagggatgat tgtatgtacg tatgtatcag 120
cgtatgcac tgtactgtgt taagagacgt agataatcag acatctattc taaattttag 180
tggtgaacac taatgaggcg gccttcgcgt ttgtatgagt gtatatatgc acacacacac 240
acacgttgta cataagcatg attaaacctt tatgcaccat aatgacacct atatgcacag 300
ttcaagtctc aatgacaccg ccatgctttt aaatgaaaag cggccgctct agacgatcca 360
agc 363

<210> 11539
<211> 236
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-022-Q1-E1-E6
<400> 11539

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gaaggtccct ccttgGCCCA tgagatgaga tatcctggtg gaaactgcac ctctgacata 120
tggtatttaag acgaaagggtg tatgacacat gcagctggag attcatgggtg tttagctcac 180
tgttattaaa atggtctcct ccccgctgc ggtgttttat gtgatgtggt atcaat 236

<210> 11540
<211> 445
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-E9

<400> 11540

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agtaacttat actagtgtca gggtgaaatg cgcgacggag gagaagcggg gtggaggccg  180
gttgaacgc tggaggtgac ggagacgtag agttctggca gggttgtggt gtggcgcccg  240
ggatgatgga gcagcggcga aggcaagaga gaaataatga aggagagaga atgatgagga  300
tgaaggtgtg ggggccggaa agggttttcg atgggccagg gtgttgaggt tctacatgta  360
tggtgtccag gcttccgcaa ggccacacac gtttgtctga agtttgctga aaaaagtatg  420
tctggaccac tcggcggacc gatat                                     445
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<210> 11541

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-F4

<400> 11541

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gttagccgct tccggcagtc cgcccctctg actcgatgaa tgggcacttt gatacgcgag  120
ggatttcgct gtgggggata acgtttcgca tgggactaga tacgtgcaca tagagctcag  180
gagaatacca gaaccaacta taacagcggc gatccagtct ctcgagcact atcagtcctg  240
ccagatcagg cttctcgggc gcgcacgtgg actgcactat gatcgagaat gtgcgaattg  300
ccgcggccat cgtcggcaga cgaatgtacc accaaatgtc ctggatccct gcgctatctc  360
tggacagctc caccagatca tcttcacact aatgtaacgt gatagatgcc cacc         414
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<210> 11542

<211> 412

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-F9

<400> 11542

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ttactagaca atatactagt attaaaacgt agcggaaaca gatggaacta gttgctgtca 120
ttgttttttt ttctcctgca gtaccggaga tgaatacaaa aaccctggaa ccaagtactg 180
aaatgaatac taccaaaaaac gaaaatggaa caaatacggc acggatacgg agacgaaagc 240
cgagtgttaa ccggaactaa agacccttg aaccatagac aaaataagaa gaaaagaaca 300
aacttgttca gttaataaga tgattactaa atattatgat ataccatgac tataaaatag 360
gatatgtcag cgacagcggg gtgctcgatt aaggattttc tctcgtgctg gc 412

<210> 11543

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-G10

<400> 11543

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caacggtgat gtttttcttc cgcaacaagc acatcatgat tgatctcggg acaggaaaca 120
acaacaagat caactgggca atgaaggaca agcaagagtt tgttgacatt gtggagactg 180
tatacagagg agctcgtaag ggccgtgggc tgggtgattgc tcccaaggat tactccacca 240
aataccgtta ctgaggtatc tgtgcttggc tattcaggtg cagtgtgtgg cctgctctgt 300
tctgtgaagt gcgctgtgtg acccttgatg taatgtctgt caactttgaa agtgtcgcgt 360
aactatgtat ttgtatcttg aatatcaaca tgcataaac ctgtaaccct ttgaaacaag 420
acct 424

<210> 11544

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-022-Q1-E1-G8

<400> 11544

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cgtgctgecc gctgacgacg acctggagta gtttaggagg atcccaggca ggaggcctgc 120
 gcctctttcg atctgtatcc cagtttgtgc tagccttctt aaggcaactt gtttaactta 180
 tgtctgtact cagatattgt tgcttccgct gactcgtcta tgatcgagca cttgtattcg 240
 agccctcgag ggcctgggc ttgtattatg atgcttgtat gacttagttt atgtgtggag 300
 ttgtgttgat atatcttccc gtgctaaaga aaaagggggg gatgggggga aagaagcggg 360
 cgcgctagag gatcc 375

<210> 11545
 <211> 396
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-G9

<400> 11545
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 tagtttagat cgagtctggt cttcatacct acagtccacg aaaaagccac aaaaaaaaaat 180
 tagggtagt tcatcatatc cgaaccaatc tgagcctttg cataatcttt ttagggtttt 240
 gctttgttga atttgcgggt gcatcgtcgt gtctagttagc tgggtcttaga gtctagtctt 300
 ttagagtttc gagttctggt cataagttgt cagccgcgcg cgcgagcatc atcgcccctg 360
 ccatctacca ccaccgcgta accgccagcg ctccga 396

<210> 11546
 <211> 438
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-022-Q1-E1-H12

<400> 11546
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 acacacattt gggcgatgac aagcttctga tcattcctat gatgaccacc ggtgtactgg 180
 aagtcgaaga cggccacttt gtacatgtca accttagcaa gcaaattcat catggtgttg 240

atggagtcct cgcgcatgc cgggttggtg gtgtacacca ccaagacgtc gttcgccctc 300
atgtgggtgt ccacatgata cacaccatgc tccattggag cgccactaga tatcttctct 360
gtattacttc gatgcattct tcgaccgtca tgtttattag gacacccatc atcagtgtta 420
gctttccttg catgatca 438

<210> 11547
<211> 57
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-022-Q1-E1-H2
<400> 11547

atagtgagtc gtattacttc cgggtgcgtcg tcctctgcgc ggtgcagcga tcggcaa 57

<210> 11548
<211> 99
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-022-Q1-E1-H8
<400> 11548

ctcgttgtct gtaactacac cctaaagtga gtcgtatata atgttttcta gatagcagag 60
attaaatatc tgccaccgca acagggttaga tttaaaaca 99

<210> 11549
<211> 398
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-022-Q1-E1-H9
<400> 11549

acgcgtgggc caacatgacg ccctatagtg agtcgtatta ggtcctcttc gcctccgtct 60
tcctcctctc cgctaccag gaattcactg aatttggaac tgatggcggg ccagctgcaa 120
agaatcttga gcctaagttt aacagcttca ccagtgatat atctgtacac ctgggagttg 180
tggtgcctca tgtagagttg aagcatgtga ttgctgctag cattgggtctg aagggtctgg 240
gaggtctgct gtttatcttg agcagttcat ttggtgctta tctcctggcc ctctaccttg 300

ctttcatcac accggttgtc tatgacttct acaactacga catggagaag gctgaatttg 360
 tgcagatctt catgaagttc acagagaacc tggcgctg 398

<210> 11550
 <211> 353
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-023-Q1-E1-A1
 <400> 11550

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 caatgctcat aggtggggcaa cctagccacg gatccagggt atcaaaactc gcatccagtg 180
 cggatctatc cgttgcaagg gtatccgaac agtgtgacac aagcaaatag tggagtttga 240
 gatcggcgga agtactgtaa aacggtcgcg tactacatgt atgtgcagat gtacgcatca 300
 catgccttga ggcgttctgt ggtactaatc ggaccacaat gcaacggtga aaa 353

<210> 11551
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-023-Q1-E1-A11
 <400> 11551

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 ggtttaagat tcattagctt tctcattcta ctctttcaca aaggaatgcg aagagaactc 180
 aatggatctt atcctattca ttgaatagat ttctttttta ttagagtatc ggcaagaaat 240
 cttggttatt cactctatct ttaagtttta ttaagtaaa ccatgcacaa tgcataggac 300
 tccccccca ttttcaaatt ttaaatttga aatactttaa ttaattttta gtccttttaa 360
 ttgacataga tacaaatact ctactaggat gatgcacaag aaaaggatcat gatagctcag 420
 tttgtagagc agaggactga aaatcct 447

<210> 11552
 <211> 456
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-A12

<400> 11552

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gtaccgaatc ccatactcac ctagaatggt ccctgcgcgg tctcctcggc tgggttgccg 180
gacagatcac tgggtggacga cacaactagc acactttgat taagtagaaa gtacatccat 240
tagatatata aactactaat acgcatacgt gaaaagtgcg cgtacgggtg atggactagc 300
caaaagtgcg gcctcgttct taaatggtaa ataataaaga aaaggaatga tagatggaat 360
cttcctata tgggtgccacc gatctggatc gccattgacc ggtcctcctg tagtgcatga 420
tcattccgaag gatcgaggtc ccagcccccag agccccg                               456
  
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<210> 11553
 <211> 429
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-A2

<400> 11553

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aaaccactgc ttagtccttg gttacaggac cggaacaaaa tgaagaagca gatgcaccta 180
ctcaagtcga accagttgct atagtgcagc attccatgga gcatgctagt accgaagttg 240
atcaaagtat agaaacatct gtgcgtctcc cagaaaaaac ttctgttata cctgggtacgg 300
aaccagaaga gaagaaagta gaggcatact cgcaagagga taatgttgaa gcagttgctg 360
cagagccaga acctgctgga ttccaggaaa atgcagaagt ttctaccaag cctagtccca 420
tggagatag                                     429
  
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<210> 11554
 <211> 423

<212> DNA
 <213> Triticum aestivum
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 agcaccatcc cgaacagccg gtgaggctgc cggcgccagc gacagcgagg tgctccttca 180
 tcatcccgta tgatacgaca cgcttcccggt tccccctagg cacgggtatcg atatggccaa 240
 ccaagtaata ccactccgcc gtagcacgca gccgatgcac caccgctccg ccgtagcacg 300
 cagccgtcac aagaatgaga tggcgctgtc agtcaattga ctcagttcca cctgcacgag 360
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 ccc 423

<210> 11555
 <211> 442
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-023-Q1-E1-A6
 <400> 11555
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 aagctaggcg tcttgagcg gtggaacac ggacacagga ttttaccat ttttgggctc 180
 tctcaaagag ataataccct acgtcctact tttgattgta ttgatatggg tgtagtacat 240
 ggtacattta tctaccagga gattgttcta atgaatatta gatcatgtat tgactagcct 300
 ggccctcactt tatataatgt accagaggcc taggggttag aagagccttc atcttggggc 360
 caagtcttgt ggaatatccc ttgtatgcga cataggctgc tagaactggc ccaatagtga 420
 aacgccatgg ggggtcctct tc 442

<210> 11556
 <211> 441
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-A7

<400> 11556

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taatcttagg gaggaggcga ctttagattc aacaatcaca ccgtcagtta cccccccacc 180
agctgcagat gctagagcat cagaactcca attctgccca gtttgccttg ccaaaccg 240
ggacatggca tttggttggtg gtcacagac ttgttcaggg tgtggaccgc aggtcgtgga 300
ttgccctatc tgtcgaaggc caattgatac aagagtaaaa ctatactaac agcctcacat 360
gcctgactag gtttgactga agtacgtgg agtggtgaaa gtagaatcca tggaaaagaa 420
aaagaactcc gtttgactg t 441

<210> 11557

<211> 345

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-A8

<400> 11557

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gctgacacca gactacgatg ctcttgatgt ggccaacagg atcggcacatca tataagtcag 180
agggaggggtc ctgcagtagg cgcttggtgtc gtggtttcgt gtgttattgg aattttgtag 240
ttgttactta gcaaaggggc tcagtggctc gattgcctac cagagtggct gcacactttc 300
atgaatttga ggcaatcgaa gtgacttggt gttgagcttt gcggtt 345

<210> 11558

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-A9

<400> 11558

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atgtcaaggc gtagcaccac cccgccggcc aaaatggcga catcggggcgt ctgtctgttt 180
ttgtgccttg tgtgacagga agaattggaaa gcagggttta ggtggcaagg gtttcttttt 240
gttctgtttc aggcgccttg tgcaaatggt gcctagtgtt gtatcatcgt ctctccttt 300
tgtacaacaa caccatttga aacatgaacc tcctgtagcg gtagatagat ataggttatg 360
caaaagacgt gggtcggtcg tcgtcgtctt catgaacacc gcaccgggcg tgttcgggtg 420
ttgcatgcaa gtagaacttg ac 442

<210> 11559
<211> 449
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-023-Q1-E1-B10

<400> 11559

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cagtcgaacc tagacgacaa aaaaatatgg aaaacagtat gttcttagtt acctaatttc 180
atatatgtac tagcacttag atgacctaga taaagaagaa gaacatgaca tatcaaccgg 240
ttttgagacg tatggttgct tactcattgt ttgtcttcgg tacatcgata ttgattagtt 300
taaaaccatc catgccaata tgagattttg ggtaatgagt cgcccataga attcgaacac 360
ttgaaaccat acgccttgcg caatcatcca gggacttggt ggcaagagtc ctccgcgaat 420
cgagcacctc anactttctg tcccttaaa 449

<210> 11560
<211> 467
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-B12

<400> 11560

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gcagaggctt ggacctgctt cggcatccag tagagcaaac aagaagggtca agccggaaac 120
 aaatatttca tctctgttcg gacttctcat ctcgcaatgg aagccaagtt ctttcggttc 180
 ctgaagcttg ttggagttgg cttcaaagcc aggacagagc gcgaaggccg cgagttgttt 240
 ctgaaactgg gctacagcca tgagggtgcag ttcaccgctc cacctgccgt ccgcgtcttc 300
 tgcttcaagc ccaacataat atgctgtact ggcatcgaca agcatagagt gcaccatttc 360
 gctggagctg tccgatgcag taaacctcca gaagtgtaca aggggaaggc catactgtac 420
 atcgacgagg tcataaagct gaagccgggg aagaaacagc agaagaa 467

<210> 11561
 <211> 416
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-B5

<400> 11561

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 tgcagccttg ggattagtcg tcgacgctgt ggctggtatg ccttcctagg agatctggtg 180
 gcggcattga atgccataag cgctgtcgc atgtattcca ctaattgcgc actacctcgg 240
 gcatctattt caaattcata gaggacgcaa caacttggtt tttcctcatc atgagaatga 300
 gcttgacaaa agtcgagcag cttatccaga cggtcgcgctc aaatgctgga tgcatacatg 360
 ccttactagc aatgatgatc atcttctgtc atgatcactt aataccttct tcagga 416

<210> 11562
 <211> 441
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-B7

<400> 11562

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 ccttgaaaac ataccacatg gtaccggtgg aagaaagtgg gtcaaaaaag ttcagcaaga 180

atggggcata cttgagaaga atctagcaga ttatatattat gtcaggggat ttgaggatcg 240
tatggatctc atgagagctg tgattattgg agcaagtggc acaccatacc aagatgggtct 300
gttcttcttt gacttctacc ttccacctga gtttccacaa gtcctccgt cggcatacta 360
tcagtctggc ggcttgctg taaatccaaa cctttatgtg gatgggaagg tttgtttaag 420
cctcttagat acttgaccg g 441

<210> 11563
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-B8

<400> 11563

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ttacagtttt ctgtagttta gatcgagtct gttcttcata cctacagtcc acgaaaaagc 180
cacagagaaa aaataggggt agttcatcat atccgaacca atctgagcct ttgcataatc 240
tttttaggggt ttttgctttg ttgaatttgc ggttgcatcg tcgtgtcaag ttgctgggcc 300
tagagtctag tctttgagag ttctgagttc tgggcataag ttgtcacgcc gccgccgc 358

<210> 11564
<211> 364
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-B9

<400> 11564

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cacttgagca tttccataat caaccatatt ttaccaggat catgtgtcaa agatcctgcc 120
aacacatcat acgagcatga tgcataccgg tggaagatgc agctgcaagg gaagatctca 180
ccttctcgaa tttcacctta gcgaagacac gggaagtatc tctcgatgat caactcacag 240
atattcacca gtccgcatcc aatgatcaca ttgctgtgct agtgtgacac attcaacgat 300
atggttgggt aactacaata tcactttgca agtctggcta cgtgatatca attatocata 360

<210> 11565
 <211> 430
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-023-Q1-E1-C1

 <400> 11565

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gctcaccggt ggtgatgtgc tctgccgtgg ttgcatggat ggcattggga atacaagcga   180
tctcttggac gtcacgatg cgacgatgat gacgttgggt gccatggttg agatgttctt   240
gggcaagagc accatggata gatgggacag tgatggagac acgacgaatg tgttagacgg   300
ggaaagtgag ggatagagga gggattctgc cgatgatatg gagatttcac atacctctaa   360
ttagtacttg ccaaggttat atcaccgctc tactactatc aacttagtac taacgtgggt   420
ttgtaccctt                                     430
  
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<210> 11566
 <211> 465
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-023-Q1-E1-C12

 <400> 11566

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gataaggaag aaagggaata tttagctaca ttgacaaaga agcaacttct attccttgag   180
gaagatgacg ctacatcgga agaggatgat aaccttatgg ataaaactga ggatgattgt   240
agtatggagt ttcttgagga gaagggattt ttcattagct ttgaagaaga cggaacactc   300
gattggtttt tctactctgc ttactgcgaa tgtgcttccc tgagtgacta tcaacgccta   360
gtcctaaaaa aattatggtg gtaccgagta cagcatgtgg agtgtctacc ctagctaccg   420
tcatagctat gatattgaac gagagtatct caagtactgc cagga                                     465
  
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<210> 11567
 <211> 340
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-C2

<400> 11567

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 tgatggatat gtcagccttc taactgagag tggcaacacg aaggatgacc tgaagcttcc 180
 cactgatgat gttctgcttg gccagatcaa gactggattt gctgatggca aggacctgat 240
 cctgtctgtg atgtccgcca tgggtgaaga acagatctgc gctgtgaacg aaatcgggtg 300
 tggcaagtaa gcagctgtgc gtggttgcct acctgcgata 340

<210> 11568
 <211> 379
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-C4

<400> 11568

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 gagtacttag gaggctccta tgcaggaggc cttgcctttc gatcggttgtt gattttgtgc 180
 tagccttctt aaggcaaact tgtctaactt atgtctgtac tcagatattg ttgcttccgt 240
 tgacacttgt gtattcgagg ttatgtattc gagccctcga ggccccctggc ttgtaatata 300
 aagcttgtat tatttttaaaa gaaagaacat ttccaaacaa aaaagcagcc gctctacagg 360
 atccaagctt aggtacgcg 379

<210> 11569
 <211> 448
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-C7

<400> 11569

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aacttgcatt gcattgccgg cgatgagagt caggttcttg aaatcgccag tgtcgtcgtc 180
gtagtagcct gcaggttcgg ccacgacgga tgccaggccg ttcacgtcaa cgccgacgtg 240
gttgctgctg atgtcccgaa actccgggtt gaggatggtg tcaagctcga cggcgaagac 300
gtggttgctc gcgttgccgt tgttctgggg gttgaagagg ccgaggaact ggctgggcga 360
cgccatggac aggttttttg tgggcgcgac gaagaaggcg aggccgttac cgcccaacgt 420
gaccaggtcg gtgacaatgg cgaacacg 448

<210> 11570

<211> 221

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-D11

<400> 11570

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gaatccggcc acggtgttgg gttttccggt gtgcctccca cagcattagt ccgaagctta 180
cataagggaa agagcttcaa gtttgggtct ctgcagatgt t 221

<210> 11571

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-D4

<400> 11571

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acttcttctt cccaaacttt ggtggtgtgg aaagccacat ctattatcta tcacagtgcc 180
tccttaagct tggccataag gttgttgtca tgacacatgc atatggaaaa cgttctggag 240

tacgatatgt tactgggtggc ttgaaggttt attatgtgcc ctggaggcca ttcctgatgc 300
agaatacact acctagatta ttcattgacat ttccaatcat aaggacaatt ccttattcct 360
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atgcacgcct aggcgaagg ggt 443

<210> 11572
<211> 414
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-023-Q1-E1-D5
<400> 11572

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ttatttttgg agaacgaggg gataacatac gccctttgaa gctctctctc tctacagggg 180
ctctttagt tttgcaaggg agaagtgtg atgtagccaa gcgagctatt cctgctacac 240
gtaagcagcg aatccttcta acttttggga agtctgtggc aagaaaagtt gcaccatctg 300
aaagtgttc acggcctact gcccgttaa cacctcctc catgcctgg ggtccaccat 360
caaggccagc taatgtaagg ccacactctc caagtccgca gcacttccgg tata 414

<210> 11573
<211> 394
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-023-Q1-E1-D7
<400> 11573

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ggcctcctgg tgcgccttgg tgggttgtgc tcccctcgga gcacccccag gtgattcttt 180
ggccattgg ttgtcgtctg gtccaagaaa attctccaga aagtttcgct gcgtttggac 240
cccgtttgg aatgatttcg tgcgatgtct aaagacatgc acaaacagc aactggcact 300
tggcactatg gcaataagtt agtaccataa cctgctataa acatgactac acaatgatta 360

taatacatcg aagattgata gtatagcagc atgg

394

<210> 11574

<211> 461

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-023-Q1-E1-D9

<400> 11574

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cagagcagca gtgattcttc ccaacttcag gttggcgact ggagtcagca agttcactgg 180
tgagtccaag cctgacactt ggtagagga ctaccgagtg gttgtgtaga ttgggtggtg 240
caatgatgaa gtggccatga agcaccttc tctgatgttg gagggtcgg ccagagcgtg 300
gttgaatcag ttagcaccg gcagtattta tagttgggag gaacttgccc gagggtntgt 360
tagaacattt gaaggtacat gcaaacgact agcagggcta acaaagctac aatcttgtgt 420
gcagaagccg aatgaaacct tgaaggatta tatccagaga t 461

<210> 11575

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-E1

<400> 11575

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aactccacta gcgaaaatga agcttttagta tacagaatgt ctcttcattt acatatattt 180
tttgcccggt ttggtcata gcacgtgag aagttgtata ttggagccat ttgatgtaac 240
cattcttttt tctttctaca gaagatgacg aaaatgttgg agctatacaa cgttgtattg 300
gacagtaaac agaatagcct ccaagaatca tttctccca tcttatattt tgctgctatg 360
ggttgggggg ggatatgtaa aagctgttat tcggtgattg ttgaacggtt gtaccaaag 420
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<210> 11576
 <211> 461
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-023-Q1-E1-E10

 <400> 11576

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atttctcctg aaaataagtt caaataaaaa catgggagaa ggtcacatat gtgtaccagg  180
aaaatgtttg cgcaaaaatg cagaagactt tactatccat gagtttgtgt acatgtcctt  240
tttttgtggc tgetgcaggc tgcaagacct gtogtcgtca tccccactta gcccatgtca  300
tgaagcttcg cccccctact actgctacac gtaagtgtc gtctgcaatt tggcacgaag  360
ttgaacaact ttagctagag ttcagataac tgaatggcag aggttgctct agaactacag  420
tagtatactt cagagttcag agtgcagata attaaatgtt c                        461
  
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<210> 11577
 <211> 457
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-023-Q1-E1-E11

 <400> 11577

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gaagattgtc cagatcaagc gtgccgaggg tgaagcagag gccaagtacc tgtctggcct  180
cggtatcgcc cgccagcgcc aggccattgt ggatggcctg agggacagcg tcctgggctt  240
ctcagtcaac gtgcctggca ccaactgcaa ggatgtgatg gacatgggtg tgatcaccca  300
gtactttgat actatgaaag agatcggcgc atcctccaag tcctcggcgg tgttcatccc  360
ccatggccct ggtgcggtgc gcgacatgc cacgcagatt cgcgatggtc ttcttcaagg  420
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<210> 11578
 <211> 429
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-023-Q1-E1-E12

 <400> 11578

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 ccctgccatg tcagaaaaaa ccttgctggg tcatggtgaa tgggtgtgaaa tggaatagaa 180
 agacaattct tgtgcttgca cagagtggaa gcgaatgtga tcgggggggtc accgtcaaga 240
 gagtgcttcc ttggctcggt agcaaaggaa aatgggtcact agtatactac tcttgcagtc 300
 acaaggttcg tatatgtgtg ttctgtgagc taaaaggatc tatttctagc atctaaagaa 360
 cttatggaca ttttagtata tatctgatga actagcactc taggatggat cagtttcgta 420
 ctgagacat 429

<210> 11579
 <211> 421
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-023-Q1-E1-E4

 <400> 11579

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 tcatgaagag agaagaagtc tcgcaaactc gtgtggcgga tccgtactac atgcacgagt 180
 ctttcttgag tctcggtgac tttgagcgtg aaactgctag ggactacctc caaaacttca 240
 tgggtacagaa taaggaccag gaaattggcc tcctgcctta tcatccaaag taagtcaatt 300
 ccggacaacc ctttcgtaca tttcaatcat tccttctcgc tcatatggag aataatttga 360
 ggtgtctttt ccccgacgca acggggcgcg cgctccttatc gttctttaac cgcgagtcctc 420
 c 421

<210> 11580

<211> 460
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-E8

<400> 11580

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 agacgggaca cctttgcctc tatcaagtgg tatcagattt ccagggttgct cggtgagatt 120
 ttacagtttt tCGTacttta gatcgagtct gttcttcata cctacagtcc acgaaaaagc 180
 cacaaaaaat tagggttagt tcatcatatc cgaaccaatc tgagcctttg cataatcttt 240
 ttaggttttt gctttgttga atttgcggtt gcatcgctcg gtctagttgc tggctcttaga 300
 gtctagtctt ttagagtttc gagttctggt cataagttgt cagcgccgcg ccgcaccatc 360
 atcatcgccc ctgccatcta ccaccgccgc ttatccgccca ccgctttgaa tccgctgtca 420
 tataccacca ccgctgccat ctactaccat atatccacca 460

<210> 11581
 <211> 454
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-E9

<400> 11581

gtaccaatcc agaattcccg ggtcgacccat ggcgtcttcc aactccgggg gcatcccat 60
 caaggccgaa caggattcgg atggctcggc ccagagcaca gctgacatga ctgcttttgt 120
 gcaaaatctt ctagttcaga tgcaaaccag gttccaaacc atgtcagaga acatcatcac 180
 gaagatagat gaaatgggtg caagaattga tgaattggag ctgagcatca atgacctcaa 240
 ggctgaaatg ggcagcgatg gtatgacccc tactaaagtg aaggacgaag aatcaaagcc 300
 agcagacagc tcttcctgag tgaagcagaa gtagcagaag caaggcgtat tagtcttggt 360
 tccatgtcga tatcatcagc cattcatcac taacttactg catgttatga gatgttattt 420
 gcaactgttat atgcatatga gatatacagt acct 454

<210> 11582
 <211> 426
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-F1

<400> 11582

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gagtacgatt aacctctgga tttgaaatca ctgcttatat acctggtatt ggccataatt  120
tacaagaaca ttctgtagta ttagtaagag gaggaagggg taaggattta cccggtgtga  180
gatatcgcat tattcgagga accctagatg ctgtcgcagt aaagaatcgt caacaagggc  240
gttctaaata tgggggtcaaa aagccaaaaa aataagtgat tttagccctt ataaaaagaa  300
aacggattct tgaacctctt tcacgctcat gtcacgtcga ggtactgcag aaaaaagaac  360
tgcaaaatcc gatccaattt ttcgtaatcg attagttaac atgggtggta accgtattat  420
gaaaga                                           426
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<210> 11583

<211> 466

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-F10

<400> 11583

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gtgaagaaca ttcgtgaata tgaagaaaag caactgaaag atgctcaagc actgcaggag  120
aggaagctaa gtctgagcaa tcaattatcg aaactgaaat accagctgga atatgaacaa  180
aagagagata tgcattgctc gattgcaaag ttaaacaaca cacatgagac cctagagaag  240
gagctgaagg gcttgcagga gagagaaact cgtgctaagg ctgatgctga acatatttca  300
aatcagatgg aagagctgaa ggctgaggct gaagactgga agttgaagtc agatgaatgt  360
gagacagcaa ttgaggaact aaagaaacag aatgatagtg ttgctgctgc attggcaaag  420
ctggatcgcc aagtgaagtt aaaggaagga cagatagttc aactta                       466
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<210> 11584

<211> 459

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-F11

<400> 11584

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gttttcgatt tgatagagag agagctagac gtagagcggg ggagaagagg aggcgattcc 120
gtcccccttc cccctgctgg agcttaattt tctctttgat tcacgggtgc catgggtcca 180
gggtgttggt gtggaaagct cttgtagacg cagctatttg ttcagcttcg cgggggactt 240
cttggtgata atggagggtt tgacaacgct ctattcaagt tatatatgaa tcattgaatc 300
attgaagagg aaattatcat gtgcttgaag aaggaatggt gtcagcccc attgttatac 360
taaactctct gatggcttta gtctgttctt ctctttactg ttgcactgca gtttcccagt 420
gtcgtagttc tgtatttagg ccataattaa tcttttttg 459

<210> 11585

<211> 468

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-F12

<400> 11585

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gacatatgtc ccaacgatga gccaacaggt gtttcctcta gccaatgatg attttacacg 120
tggaaactcc tcattggtcg ggggtgttaa tgagttatcg gatccaaaac ccgacctgat 180
agcttaacgg cgttccgttg cgggtggatgc cacatgtcgg tcacccttga cgaaagcact 240
tctgtgacgc gcgatttatc gtcattggaag tggacacttc cgtgatgata attttggtaa 300
tgtcatggaa cacttctacg acagcacagg tatgactacc ttgactatgt cataaatttg 360
tcatggatgt acatgcatga caaaaaacgc gacctactgt gacaaacacg tatcatcacg 420
gaagtgtatt ttttttgtaa tgtatgatgg actcatatgg aataactt 468

<210> 11586

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-F2

<400> 11586

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catgatacca cttgttagaa taaatccgag acgctccgct gatctattaa ggaccaatca 180
atcacacgag cagcacaccg agatttgta acgagggttca ccgatatggc tacatccccg 240
gggcctgact atggacgctc ctctcgtgac accgtcacia ttccacaccc ggctcgccctg 300
gacaccggca catgccggcg gcttcccccg cggtccgggtg ctattatggt ggcataggct 360
acatcgtgtg tctacctccg ctatatatga aagggttagg atacaagtgt cctattagga 420
cataa 425

<210> 11587

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-F3

<400> 11587

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acaggaaaca tagttgaatg tacagacatt gtatgagaga cagatgcaat agatagtgtg 120
gaaaaagatg gcatgaaata gttgacgtgt atattgttta actaaaacgg atagcatgac 180
ataatttcac atatatgatg tctatctaaa ctggatagca tagcataaca taattcacag 240
atatgatgaa taactaaaca agatcacatg acataattca cctacatggt atctaagtaa 300
tcaggatcgc atcatttaat tcacatatgt gatttatatg ctaaacagag ggcattagat 360
atgatgtctg aactaagaac atgggtgttta atattgtgta tatgatgtct aatctagcct 420
cggttttgc 430

<210> 11588

<211> 455

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-F5

<400> 11588

gtaccgatcc agaattcccg ggtcgacttt cactgtaaat atcaaactcc tcatagactt 60
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 aaaatcacta agggggcacta gatgcactta caagaataat ttgaggtgtc ttttccccgc 180
 agcaacgggc gcaccgtcct tatcgttctt taccgcgag tctcccacgc cgtgtatttc 240
 gacccttcca gagactacga gaaaaaggac tacaccaca taatgaatat tctagatgat 300
 gctctccaag gcttcagcat tagaggtggc cacatgcaga tcaagaaaca aaggaacaag 360
 aagatgggtt tcgcacataa aactaacttc tctgcatcc atgttcaga accaaacaag 420
 aaagatggat tctacatcat ccattctcatg attga 455

<210> 11589
 <211> 313
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-023-Q1-E1-F6

<400> 11589
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 aacttacgct cgatcatgta gtatcagatt tgcaagttgc tctactgagat ttacagtat 120
 tgctgacatg aaatggagac tgttcttcat gcatacatc caatcatctg tccatatgga 180
 atatgacggg taatgcagca tagccgaatc ggtcggagac ctagcatgat ctttggaggg 240
 ttattgcttt gctcaatttg tggatgcac gttgtgtcat gttgcttgtc ataccgtcta 300
 gtctgtgtaa gtt 313

<210> 11590
 <211> 457
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-023-Q1-E1-F7

<400> 11590
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 tgctgatgtg cccacaagtt cgcttactag tatccctgtg gatctgcccg tagctgcaac 180

cacacctgtg gatgcaccgc ttgacatcga cagtcttaca gaagagaaac tgctgcacga 240
gctggaggaa atgggcttta agcagggtga tctgaacaag gagatactga ggcagaataa 300
gtacaacctg gagcaatcgg tggatgatct gtgtggtgtc aatgaatggg gacctctgct 360
ggcgggactg aaccaaattg gatttgatga caggagacc aacaaggagc tgcttgccag 420
aatggagga aacatcaaac gacctgttat ggacctc 457

<210> 11591
<211> 465
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-F9

<400> 11591

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atataaagtt tgatcatggt tatacctcga agagtccagc aattgtcaat ctacttgaga 120
tcatgacaga atttactccg gagcaacaac atgcattctg ccagtttgtg actggtgctc 180
ctcggcttcc acctggtggc tttagcctccc taaatcctaa gctgactatc gttaggaagc 240
actcctcgac tgcggcgaat acttcaaattg cagctggagc agcagagtct gcagatgatg 300
atctgcctag tgtcatgact tgtgccaact atcttaaact tccgccatac tcgacaaagg 360
aggttatgca caagaagctg ctttatgcta tcaacgaagg ccaaggggtcg tttgatcttt 420
catagtgggt tcaaaaactaa catacagatg gttggtgcac atgta 465

<210> 11592
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-G10

<400> 11592

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taaacatata gtagtattat ataccaacta caaattattt gaataaagaa aacataaatt 120
tgaataaagc attcatgaaa accaagaatt gaaagaaatc gaaaatttga aaaggtatgt 180
atcaattgaa aaaaagttca caaaaaggga aaaggtttgt gaatttggaa aaagttcatc 240

aaaatttcaa aaaaatctca ttgaatttgg aaaaagtttg tcaaatttga aaaatatttg 300
 aaagggttca ttgaattttt tcaaaatcat acaataaaaa gcattaaatt ttaaaataag 360
 ttacagaatt tggggaaaaa tcatcaattt tgaaaaaaag ttcacaattt tgaaaaaaac 420
 agtttatcaa ttttg 435

<210> 11593
 <211> 463
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-023-Q1-E1-G11
 <400> 11593

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 tcagggccac cggcccatgt atacctcgag caacgaagcc agggattttg ccatgagaca 180
 gcagatgata cagcatcttg aactgctctt ggtgatgtac aatgtgaccc ttgccctgtg 240
 gggacatgtc cataggtatg agaggttctg cccacgaag aattcacagt gtctgaacac 300
 atcatcaagc ttcatatacc ctggtgcccc tgttcatgtt gtgatcgga tggcggacaa 360
 gactggcaac cgatctggca accaaggcgt gatcatccag atgttcccat ctttccacag 420
 cctgngatct ccatgtaccg tgggtggtgag ttcgggtaca caa 463

<210> 11594
 <211> 418
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-023-Q1-E1-G3
 <400> 11594

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 actggtggaa cggccgctag ccacctcaaa ctccatccat ctggatcgat ccatgcatgt 120
 accaccact atactactac ctagttacag caattccttt tcatcttgc caaccactta 180
 tgtactatta gctagctgcc gctggtgtct ttttagttct atatttggtg tactgaacca 240
 gtcgtaagag agggagtttt tagttccatc tacctagttt ttttctgcgt tggagcaatt 300

caggtgtact acacccgaga gtagaaaaca ttttgttatt ttttggtgaa acttttgcaa 360
 tacctaaaac atttgttcat gtttgatgac acaaaatata tagtcaaaat ttgcgtgc 418

<210> 11595
 <211> 415
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-G5

<400> 11595

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 tcgccattcc taaaagagta gaaagtggag aggggtcaga aatgagaaga gagaaacttt 120
 ctagggctta agcttagtgg tcgtgtccta cagtcaacgt gtgctctgat accaactttg 180
 tagcgaccag acctcaaatg gcctgtgctg ctgtgcacca gtgtcatccc tggatcagta 240
 atgctgacac gcacagtaca aatggaggat ttataacaga gtagcaatca cacacttatt 300
 acatccaata tctccaaaga gattaagtat gataagcatg gcttaaggcc atctaataac 360
 gataacagcc gaagacttgg gagataagtg aatccatcaa ctccagcggc atcac 415

<210> 11596
 <211> 430
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-023-Q1-E1-G6

<400> 11596

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 atgtatgcat gtacatgagc gtgtgagtct tagaaatctt tggaagttag ataggcgggtg 180
 cgctgggtggc gtacatgaat taccaatcca aatatacttg cacgaggctc tgccgtacca 240
 ccacaactgc ttcaggtcaa aagggtggccg gtgcccgtgc acatcaccgg caccagatcc 300
 ctccaaaaca ataaaatcta gtgttgtaag gtatcatttc atctgttcca gcacgagcgg 360
 ccggctcagc atttccatct gagtagtcca tccgtcttgg aaaacttgtc gtaacctttg 420

ttaagcaatc

430

<210> 11597

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-G7

<400> 11597

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ggacgacata gogatgtatg ggttgatctt gagagtccgt ccatgcatga tctatagtgc 120
tgctcacatg ggttcacttc catgcgatgc atgcagaatc tcatgagcaa catttagttc 180
attaagcact ggtcattagc atttaattaa tcaaagaaaa accagccgtc acagccatta 240
tctgaacggc aacacaatgt gttttatgca atcattagtgc gctatatgtg caatgaaaaa 300
gaaaaacctt taaaacttgc acacaatttg cattgaattt gcactttctg aaatatgcag 360
agaataatat aataatgcat ctgtcgca 388

<210> 11598

<211> 324

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-G9

<400> 11598

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ctatcagaat tagtattatc catagcgtga agtagtatta ctagttgaaa agctagtttt 120
atcaactaaa caaatcttg gagacgggtgc tacaaaacta atcattgact gcattagcac 180
ttcggcttac agaagcaaca aataaaaaaa gaaaattgaa agaaaaaaag cgggcgctct 240
agaggatcta acttacgtat gcgtgcatgc gacatcaaag ctcttctaaa gagtgtcacc 300
tattttcatt tcaggggctg tcgt 324

<210> 11599

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-H2

<400> 11599

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cgagttctta cctcgaaagc gtcattctgg caaaccaaga taaggataac ttcctcgtgc 120
cttactttcc cgagtaagtc caccctcaa ccggcccgtg acatatgaat tcttacattt 180
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tcctaagccc caaatattcc atggccacgt atttcgaccc ggaccgtcag tcgaacgtag 300
actacacaaa tgtcaagaag gttcttgatg atgttctccc cggctacgcc aaatctggag 360
gcaccttcac caggcctatt cgtaagtacg gcaagcacgt gttctccac aatacgatgt 420
tctgctgcg 429

<210> 11600

<211> 420

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-H5

<400> 11600

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tttgtcagcc aatgcggggc cattgttaga gacaacgtct cgatcgccgt ccaggagtgg 120
aatgagccaa agaaggcacg aattgatggt ttcacttttg tcgataagag aacaaaaaaaa 180
gattgcttca agaagcttat ggaacatttc gttctacctc cggaatacaa caaattcgat 240
gaggagggta acaagattga ggaaaacaag gagaggagga cgctagtcaa acagttcgct 300
cttcataaga tggccgacgc attccggaaa ttcaagcaaa atctagccca tgactttgtc 360
aagcagaaca agactccgga tttcaaagga caatatgaga aactgaaaca tgattggcca 420

<210> 11601

<211> 373

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-H6

<400> 11601

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 caaaccaaga taacacaaca caggatagaa acatggtggc tgaagcatcg acgccaactg 180
 acccaaagca ttatgttact gacaggactt gtgtagcatt atacgatgca tagaagctat 240
 caactcatgg gttccacgtc ctcatggctg gaacgtcgct tgtaagtggg ccgttcgtgt 300
 attaccggtg acggcaagca agtctaattg aaggggtttc aagaatcgcg acaaacgctc 360
 ctacgtttta tca 373

<210> 11602
 <211> 447
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-023-Q1-E1-H7

<400> 11602

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 ttacagttt tcgtagttta gaccgagtct tttcttcata cctatagtcc acgaaaaagc 180
 caaatttttt ttagggtttag ttcatcttat ccgaaccaat ctgagctttt gcataatctt 240
 ttctgtattt gctttgttga atttgcggtt gcatcatcgt gtcaagttgc tggtcctagc 300
 gtctagtact ttagagtttc gagttctggt cacaagttgt cagccgcgcg ctgcaccatc 360
 gtcatcaccg ctgccatata ccaccatcgt catcaccgct gccatatacc accgtcgtca 420
 tcaacgctgg catataacat catcatc 447

<210> 11603
 <211> 438
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-023-Q1-E1-H9

<400> 11603

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 ttccaactgt cctggccgca gtccggccag ggctctcctg ataacgagag atactttagc 120

gaacttaaga tgtcaccgaa aggtgagcgt tgaaagatat ccgctgcggt gaactccatg 180
atcggtgccc aatcggattc gatcagaagg ggcgccggaa gtttgagatt cgggaaagga 240
ttccggggcc ccggattcac aaccttcatt agggacangg tcatggttct gctccattgc 300
cgtanagggt gcagccctcg aggcggtgtc tagccatccg tcctcgatct gcgcagccgt 360
ctccaaattg aagatcggag cgggttcgag tacggcctcc aggggtactgt ccggctgcag 420
aactaaatca tgctcgcc 438

<210> 11604
<211> 461
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-A1

<400> 11604

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aaccgaatca cacagaacaa gggagtcctt gctctgatac caattgaaag tgctagttat 120
cgactaaggg ggggtgaata ggcgattttt atgaaagtct tcaaaacatg agagttttgt 180
agaaaaacaa tagaaataaa cctattgaca tgcagcggaa ggtagactac actagacaag 240
ccatagccaa gtactcaatg aactgaaaac acgaagacta ttagcagcta ggtagtatgg 300
atcaggatgg aagatagtgt gaagccaaac tacattagtc atcacacagt gaagtcaaac 360
agataatgca agcaggcaat gacttcacaa ggacaaactg taagtaaaga gaagtaagag 420
gtagaaccag ttgcttggtg aggacagtga ttttgttga c 461

<210> 11605
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-024-Q1-E1-B6

<400> 11605

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ccatttacag gaccgcccac acaagttaca cagaactgga ccatcaaagg cccattcgag 180

atgtcgacaa tttcgagccc atcattagtt taagcccgtt aacgaaccgc tacgttttgt 240
 ggcccaattg cggcccgcgc ttcttttggc ctgttagcag cccatcgtca gttccagccc 300
 gttaatggcc cataacgtcg tgcggccttt tctcggaacca ttctgcagtt gggccaattc 360
 tagcccgtg tgaccttagg cctgtcctcg gaccattcgg tacatggggc aactcttgac 420
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<210> 11606
 <211> 434
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-024-Q1-E1-B8
 <400> 11606

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 gtcttctttc cgtcctttct ggaactgaat atgctgctgc ttactcccag cccatgtcat 180
 cgtgttcgtg ccaaagetgc tacgcatgcc aactgtggtt gcaacgtgcc tgactgtgcc 240
 tgcacagacc ggggacagct tgccatccta taggagacac ctttgtgcgc actgctcatc 300
 ggcttacacg atccacagtt gactgtactg tccatggacc gactcgggtca gctctcgttg 360
 tgccgaaacc gctctcatca gctaccgaat cgattgatca tacacttttt accagcttcc 420
 tggctgaatg ccta 434

<210> 11607
 <211> 454
 <212> DNA
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 <223> Clone ID: LIB31-024-Q1-E1-C8
 <400> 11607

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 agtacgcctc caagccgtac acttccatgt ggcaactgcg gatcatgtgg cccgtgtcat 180
 ggctgtccat ggtactgacg tgggcatacg gttcttggtt cacagttgag aggaattcca 240

tgaagaagct ccggatgcag tcatgggcta taccaggata cactttccat tatggactga 300
acaaggataa ggaggcaatc aatgacctga ttgagaaggc aatatctgaa gctggtaaga 360
aaggagctaa agttgttagc cttggacttc tgaatcaggc gcatagcctc aatgggagtg 420
gagaacttta tctgcagaaa tacccaaagt gggg 454

<210> 11608
<211> 454
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-024-Q1-E1-E5
<400> 11608

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gatttgccaa gttcttcaag gagtcaagcg atgaggagag aggacacgcc gagaagctca 180
tgagtagcca gaacaaacgt ggagggaggg tgaggctcca gtcaatcgtc acacccttaa 240
cagagttcga ccacctgag aaaggcgatg cctgtatgc aatggaattg gctctagctc 300
ttgaaaagct ggtgaatgag aaactgcaca acctgcacag tgtagctaca aggtgcaatg 360
atcctcagct gaccgacttt gttgagagtg aattccttca ggagcagggt gacgccatca 420
agaagatctc tgagtatgtg tcgcagctga gaag 454

<210> 11609
<211> 334
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
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<400> 11609

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aaccctgcc acattgagct gatcttgtca gagaaggaag agcctgtgaa gaaggaggct 180
gataacgtcg tcgcaccaag gaaagctatc taagctaccg gaatggatgc attcgtccaa 240

cagtcttagt tgtagttctt ctcaagtacc tttgttggca gtgtttgttg cctccttgat 300
 gtnnttgta ccaacattga gtaaggattt gtta 334

<210> 11610
 <211> 478
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-024-Q1-E1-G5
 <400> 11610

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 tgtatctgat gacggagctt caatgctgac ttttgatgca ttggctgaga cttcagagtt 180
 tgctaggaaa tgggtaccat ttgtgaagaa gtatgacatt gaaccagag ctctgagtt 240
 ttacttttgc cagaaaattg attacctgaa agacaaagtc cagccttcac ttgttaaaga 300
 ccgccgggccc atgaagagag aatatgaaga atttaaaatt aggataaatg ccctagtttc 360
 taaggcattg aaagtccccg aggaagggtg gattatgcaa gatggcacac catggccagg 420
 aaacaatacc agggatcatc ctggaatgat tcaggttttc cttgggcaca gtgggtggc 478

<210> 11611
 <211> 312
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-024-Q1-E1-G6
 <400> 11611

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 tgattctcaa gattagagaa ccacagggca aaacccactc aaagtacgtg actggcgtgg 180
 acattgcact gtagcgtaca ggctaccgtg aatggtctga gacacaggtg cttacgttct 240
 cggcaaacgt aactggcact acagctaaag acatcaagga catcggttctg gtcagccatg 300
 tattttcgaca cc 312

<210> 11612

<211> 468
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
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<400> 11612

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 ccaactttgc caactcatgg ggagatgggg tgctagtgat ggtctctggt cttgtacaga 180
 ccaaagagta cagcaaccaa aggaaattta tccagatggt tttccttgcg cctcaggaga 240
 aagggtactt tgtgctcaat gattatttcc actttgttga ccaagaacaa gtgcaacctg 300
 cacaggtgag agctcaggaa gcctttgaga ccaacatggc atccaacaca gtccaaacaa 360
 gtgcagagta cattcatgaa gaaagtcaaa caatgcaagc tgttccagta acatctgaag 420
 aaaatgatgc tgttgactgt tacacttact ctgagccanc acagcaag 468

<210> 11613
 <211> 365
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-024-Q1-E1-H8

<400> 11613

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 tggacctgtt caaggcgcaa aagcaaagt tggatcagc gtcggcgagg agcatttctc 180
 tctctctcca gtctgagctg tggtcacagc tccgtgacaa aaggatatac acaggtagca 240
 cagtatcagt gtaagcatcc ctgctcaatc aagtaaagct cagtttactc gtgacaattc 300
 ttttatgtc ggtaccggtc aatcagcggc agcccaacac gatatatgct tacgtacgcg 360
 tgcac 365

<210> 11614
 <211> 456
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-A1

<400> 11614

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aaccgccaga tgcttaaacc atattatgac cagctgggat gcaagtcggt gtcaacaggt 180
gcttttaaac cattttttat gacgcttcca gcacccctca agttcccaca acaagtcaca 240
aggagaaggc ggcgaaaata accatctcag tattggtttc catttgatat ggttgtgata 300
ggaaaggtat gcattgccac cgtcgaaaga acctatgtgc cctcagctca gtttcaccaa 360
tgtagtggag aaaatgatta ccgtgggtgt tccgtttttg ttttctattg tcgcttggga 420
attgctacaa gagaggaacc atattacgga tatata 456

<210> 11615

<211> 453

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-025-Q1-E1-A10

<400> 11615

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actgagcaga gctgatggtg atgatgctat ggaagttgat ggccagcact ctgacaagaa 180
gctgcgtatg aggtcgaggt ctaggtccaa atcacgacca attgaagagg ttgtaccagg 240
tgacgggatc cgggatgttg ctcaaaagaa gaaggccatc aagaaatcga gggactctgt 300
caagaacagg aacaaggagg ctgccgtgg agaggcggat cgcgtcatcc ccaccttgaa 360
accgaagcat ctcttctctg gaaaacgagg aattggaaag acccagatgc gataaaccag 420
tcaatgtgga cgttgctgct tgcaatcact cga 453

<210> 11616

<211> 391

<212> DNA

<213> *Triticum aestivum*

<223> unsure at all n locations

<223> Clone ID: LIB31-025-Q1-E1-A12

<400> 11616

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aatgccgatg aaatcatcaa tttcttcgct cggattgaac acaacttctg tcaactgcaca 180
cgcacaaaaca cgcaaactga tccagagggtg tccagattta gtatgcatac atatgtgaca 240
gcgtaacaa attcaatctt ggaccagtc aaatatctat ttcaagccga atgcatggac 300
aacatcagac gtgtgaagtg cacttccata ggcatangaa aaacgatgct gncgggtgct 360
ttcagttaac aaagcacagt cactaatgag t 391

<210> 11617

<211> 452

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-A4

<400> 11617

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ccaactgtga agcttccggt gttggtaggt gtgagatcaa caatggagga tgctggaaag 180
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gtccacaagg tttcaagggc gatgggtgtaa aaagctgtga agatattgat gaatgcaaag 300
cgaaatctgc ctgtcagtgc aatggctgca gttgcgagaa tacatgggga agctatgaat 360
gcagctgtgg tggtaacaac atgttatata tgagagagca agacacgtgc atcagcaaac 420
aagctgcctc ctcaagtcggc tggagcttca tg 452

<210> 11618

<211> 444

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-A5

<400> 11618

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ggtgcgttct tttttctccc tggttattta atttgctgta gtatagattg cagtgtgttg 180
ttctttgggt atggtgaatt acattctctg tgaatagttg attctgggtc caatccaata 240
cctgaggttc ttggcattac taggtttcta tttatatatt tatttacaaa gcagtagcaa 300
aagattcaac cctgaaatta tgccctttat ttttgacaga tttctgggca agacaaagca 360
tcttcaaatg tcaatgttcc tgtaactcct aaaatgaagc ctataccact atcaaatcca 420
cctcaaccaa tgagatttgg tgat 444

<210> 11619
<211> 353
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-025-Q1-E1-A6
<400> 11619

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accggtgttt gtgttttgcc attatcgagg tgcagctcgg cagggacgat gttgaactgt 120
gctacttggt agctgcactg tgatttctc gaagaggaaa ggatggcgca gtacagtaga 180
gataagtatt tccctcagtt aagaatcaag gttatcgatc tactacgaga accaagcaac 240
acctctttag cagtacctac acataagata acagagacta gcacccaaca caaacaatgg 300
gttgtcaatc ccttgagggt taattgcaag gatcaactct catagtgata gat 353

<210> 11620
<211> 444
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-025-Q1-E1-A8
<400> 11620

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gtcctctctt ccagatcaga tcttacgcc gcccgcccga gtctttctcg ccgccaaaag 120
caaatgacga tgctctacga aatccactcc catgcccaaa tccaagacct gcaggcccgc 180

cccgatgagc tggggccactc caacaagcgc atggatgtga agcttgtctc tctggagtcg 240
 gtgcgcatac gcgcgcagtc gtatgcactc ctctgcccgc tgatcatgga gtcgacgatg 300
 tggttttgcc cggagctgga aatcctctcg gagctggcaa gcttgtcgct gggaattcaa 360
 aagctcaagc atgatgtgtt agcccagctc aaggttcagg aggctaagct gggaaagggc 420
 gccctggaag ccctcctact catg 444

<210> 11621
 <211> 371
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-B1

<400> 11621

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 cctggaatct ctacgcatgg cttaccctac cttgagcatc acggatgggtg atgatattgt 180
 ttacttgttg gccaaagggca ccggcatgag ggctatgccg acagtattct ctgttgatct 240
 cagtatgcgg actctgcgag gagtggcgaa gctacccaag aggcaccttg gttttatgcg 300
 ctacttcctt gccagtggaa tctccaaaca tatcaggact ccaggtagaa gtgattcgct 360
 tgggcaaact g 371

<210> 11622
 <211> 446
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-B2

<400> 11622

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 aacgcctca tcttcggggc ggatgatacg ccatgggacg gaggcacgtt caagcttacc 180
 ttgcagttta cagaagatta cccaacaag ccgccaactg ttcgttttgt ctctatgatg 240
 tttcacccaa atatttatgc agatgggagc atctgcttgg atattctaca gaaccagtgg 300

agccctatat atgacgttgc tgccatattg acttctagtc agtccttgct gtgtgatcca 360
aaccccaact ctccagcaaa ttcggaagct gccagaatgt tcagccagaa caagccagag 420
tacaaccgca aagtccgcga gatcgt 446

<210> 11623
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-B3

<400> 11623

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ccactaacgc acatcgccga agatgctgaa gtaaatttag aaataatgcg agtagtaata 120
tcaagtctaa gacttggaac tttgatggac tgggatacca ctgttctcct aatcatccaa 180
cagttcacia taaaaacaat ataatgttca ttaagtcatg tttctgagat tattttatac 240
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gtgggggtat atatataccg catattgcga ctcttttttt gggtaaagga acatatgcta 420
tttacatcag tatacttcac aatatagttt a 451

<210> 11624
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-B7

<400> 11624

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tagctatggc accaaagaga ctgacagctg ggtgaggcca cacctggagc atgatggctc 180
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gctagcaggt ggtggtgtcg atggttctgc tgatcgatc atggatgaga cgctttactc 300
gaatggcgct gatgatttca tgattctgcc agcaggcaag aatggggaga agaagaagca 360

gctaaccatc gaccaagaat tcgagcagta cttctcaaaa ctcatgcttt agcgtgatcg 420
taacagagaa tttgctgc 438

<210> 11625
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-C12

<400> 11625

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aactagagaa aacaaaaaca atagggaaaa aatctactta gtgaagaaag caaacaagca 180
tacacaagaa tatcaacccc aactatttgc tccccagcaa cgacgccaga aaagagcttg 240
ataatcccca agtgcaagga atcatcgtag atatttccaa aggtggaagt gataagtatg 300
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attgagacaa ctctatgtaa accgaaagtt tgctttc 397

<210> 11626
<211> 461
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-C4

<400> 11626

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ttggaattgc gtttcgttac cacaataat gaaaatgctg accaatctga agaattgctt 180
cctggtggga gaggaatgcg tgttactgat cataatgtta ctacttatat tcatctaatt 240
gccaaccatc gtttaaacta tcagatccgt agtcaaagta cacatttttt gagaggtttt 300
caacaactca taccaaaaga atggattgat atgttcaatg aacatgaagt tcagtttctc 360
atatccggct ctccgaaaag tttggacatt gatgacttgc ggtcaaacac caattatgct 420
ggaggatatc atgaggggtca tcagggttatt gatatgttct g 461

<210> 11627
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-C5

<400> 11627

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 ggaaacaggt tcatcaagac tgctgcttat ggtcactttg gccgcgatga tgctgacttc 180
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 gaagaagcat tagacattga agcgacgctc tacactgggc ttgttgtagt gtagtcagt 360
 ctaagtttct tactgtcatt tcatatattt atcctttcca ttttgagtcg ctgaaactgc 420
 tgagtgatgt gcagtttgct 440

<210> 11628
 <211> 320
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-C6

<400> 11628

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 aaaggcgagg gtttgccgaa acaagtggca acaagggaga gcaagagaaa tctaagtaaa 180
 tagcttggac tgaagccctt gtagtccttt gtgccagcct tgttctacat gtttcttaca 240
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<210> 11629
 <211> 442
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-C7

<400> 11629

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tccagatagc aagcattgtg tgttctggta ttcaacctct tcacaatctc accttggtga 180
gatttatcga gcaaaaagtt ggaacagggg agagcatccc gtgggtcaaa caacagattg 240
atagaggttt cacagctggt gagaacatga tcaaaggctg tgctgggaag tttgctatgg 300
gagatgaagt ccaactggca gatgtattcc ttgcacccca gatttttggc gcgggtgactc 360
gttatcaaata cgacatgtcg aactatcgca ccctcgcgag gctctacgat caatatatga 420
cacaccctgc atttgaagct gc 442

<210> 11630

<211> 389

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-C8

<400> 11630

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ggccaatct agacaccatc tcggatgggg ttcaacacct ccattgggtgc ctctctgatg 120
atgtgtgagt agttctttgt agacctttgg atccgtagtt agtagctata tggcttcac 180
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atatccatga aagttatttg agtttcgttg atctcttata tgcattgatct cttatagcct 360
cgtatttctt ccccgacata tgggttctg 389

<210> 11631

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-C9

<400> 11631

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 acagactggt ctgtttttga cagattctgt ttttcgtgtg ttgtttactt attttgatga 180
 atctatggct agtatggggg ggtatgaaat atagagaagt tggaatacag taggttttaa 240
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<210> 11632
 <211> 428
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-025-Q1-E1-D2
 <400> 11632

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 gctctaccac cgataagtgt gcggcctcgc gcgtgggggc cgccctccg tccataggca 240
 acgcaacctg ccctggattt agttccaagg ctgcttcggg gatgatgtcc tgggcactgt 300
 ccgatagcag gtctagggtc tgcttgctgt ggctgtccga cgctcctggc gtaggctcga 360
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 tctagtgg 428

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 <211> 417
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 agtgtgaaga gtgcaaacc tagaaaacaa gcatcggggc tgcagtgtat atagatggag 180
 tggttttatt tttatctcca taaaaatcgt tttaaattgt gcaagaaatg gaactcttta 240
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 ctaaggagtc agctcgcaat taacagtgcg cgccctcccg tcgcgcttac taatgttcac 360
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 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-E7

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 ctgaggagaa catgcgtggc atctgctttg aggtctgtga tgttgttctg cacactgatg 180
 ctattcacag ggggtggtggc caggtcatcc caacagccag gagggtcatt tatgcttctc 240
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 agaatgcact tggcggatc tatggtgttc tgaatcagaa gagagggcac gtgtttgagg 360
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<210> 11635
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-E8

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 gcttggggat accccagaag gcatccctc tttcttcaac aagtatcggg atgttttcgg 180

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 tgcacttcac ttaaataattt tgagtatggc tttatagaat gcttcatgtg cttcacttat 360
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<210> 11636
 <211> 258
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-F1

<400> 11636

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<210> 11637
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 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-F3

<400> 11637

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 aggaagcggg ggcgaaagct gctgcctcag aagaaaagga gcgatctata aatgagagac 180
 tgtcacaaaa tttatccgcg ataactgtcc tggagacca gattacaatt cttaggacag 240
 aacagacaca gctgagccga tctcttgaaa aggagagaca aagagcatct gaaagtagac 300
 aggagtacct agcaaataag gaggaggcgg cattacaaga aggacgcgcc aaacaacttg 360
 aagaagaaat aaaggagctt agagccaggc acaaaaagga gctgcaagaa gcagcagaac 420

acatggggct gc

432

<210> 11638
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-F5

<400> 11638

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ttatggttgg aagacctgcc ccaatgctcc tatcgggaaa gccttgagac aacaaaatga 180
tgacgtcaag ttggagttca atacgaggct tactgatatt gtgacacaat tcaagatgca 240
aggtgtgaac actgctttgt actacaagaa caaagagatg gaagatacat ttaacattgt 300
gcctaccagt gcagtaagtg gtgaaggcat tcctgatctg cttctactat tggtgcaatg 360
ggcacaaaag acgatggaag aaaagcttac ttttgttgat gaagtcacgt gtactgtcct 420
ggaagtcagg tcatcgaagg tcat 444

<210> 11639
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-F6

<400> 11639

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aacaagagtg gttctacatc accgagccgc gccgcactaa gtgggcagcg attccggagt 180
tcagattcgg acccccatg aggctcacct cctggaatgc gaagggccat gactgggggt 240
cccagatgga ggtgcatgag ctgcaaatgt gcatcactaa catgctgggg aagaacgttg 300
gtctatccaa cgtggttcag atcaagctct tccgctgcat tctcccctac cagcgccggg 360
cctcccccat gtgggaattc aaaccggagg gacccgggc gttgccccac ttctctgca 420
ccatgaacga gtcatgagga catcaatacc 450

<210> 11640
 <211> 415
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-025-Q1-E1-F7

 <400> 11640

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 aattatttca taccacacag atcaggaaaag ccagccagca caaggggacg tatggaggga 180
 ttttgcttg gagaatatct aactgcttat gatctagtag aagtgttca agggatcaag 240
 attctgctgg aattctacga gctgcacggc ggactctggc cttttagat atttcttaa 300
 tccagtggat gaactagtgt actgtatctg gttgaactgt actgtgtcat ggcaatatgt 360
 atatgctcca gatattggca gcatgatggg attgaacatc gtcagaaact agatt 415

<210> 11641
 <211> 435
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-025-Q1-E1-G1

 <400> 11641

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 atgctgttgt ggctgaagcg acttatggat gccgacatgc ttgaagattt tgaagatgaa 180
 accgacctca acctggtatg gattctgtcg atttggtcac tatcaatggt gatatgaatg 240
 attttgttta ataacatatt aatattttta gataatgaac tacatctaaa acttttttta 300
 tgtagtgaag tagatctgaa cctcgctggt ggagttgatc tttgagtcga tgttaagtaa 360
 aagttacatc tacttggtga tgccaagacc gccatttcgt tcctaaatgt cgctgccttc 420
 ttatgtttca ccaat 435

<210> 11642
 <211> 454
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-G4

<400> 11642

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cacttttctg gcaaaggatc ttccagggca attgtcatcg aaggctcaag ctttagttga 180
agcactggag ggaaagcggg ttgactcatt tatggacgcc ttaagagata cagcagagga 240
aagtggcttg ttatttaaga agcttgataa aagacttgag cgatcaatgc tgcattccta 300
ccgcaaggat ttgatagcac aagtttcttc agagactgat ccagtttctt tcttcccaaa 360
agtcgttgct ctactttttc tccaggcaca caacaagggt cttcaggcac ctggaagggc 420
tgttggtgct gtcatcacac tactgaagga caag 454

<210> 11643

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-G5

<400> 11643

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tccgatgaat gctcgcggag ggaagatggg gaggttcaga tctaaatccc cgtctctttt 120
ataggtagct catttgcgca gctagggggg taaatgaaaa aacaccctgg cttttcgcac 180
tcgtttgaca cgtggaggac gactattatt ggtcacagaa gccgaggagc acaacattca 240
ccagaagcca gacactattc aacagggtata tggagtttgg agaagaacct gccttgcaat 300
gccgaagaca aatctgcgcg ccggactcat cgtcattgat gcctggttcg ggggctactg 360
agggagtccc ggattagggg gtgtccggat agccggacta taacctttgg ccggactcct 420
ggactatgag aatacaagat tgaagac 447

<210> 11644

<211> 399

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-G7

<400> 11644

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gtatggaatt atgtcagcta aaaacctttt attggatgta tcctgatggg tggtcacatt 180
ttggtggtat tatgtacttg cttgaactaa atcatgagtc attttcaaaa aaaagaaaaa 240
gagaaataga atatggaaca aggaaataaa gctatgcatg tgaacaaaag aaatggacac 300
taagaaggca caaatgagtg agcgtatgaa agcaaaaaag cgggcgctca aaaggatcaa 360
agcttactta cgcgtgaagg gaagttcaaa cctcttcta 399

<210> 11645

<211> 454

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-G8

<400> 11645

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ccgatgagac cgtcaagaca agttccttca aatgcttcac atgcagaggc cgaggccacg 180
agtcctatga gtgcaccaac aagcggacca tgatactcaa tgacgacgga acctacgact 240
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atgaagagga acaagtcttt tgtgatgaag attcaagtct cgctcttggt gtctccaagg 360
tattgactct ccaacataac caagaagaag accaaaaatg ccacatatcc cacaccaaag 420
ccggcatcac tgtaagatcc gtcaaggtca tcac 454

<210> 11646

<211> 348

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-G9

<400> 11646

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 cgtactagta actcataagc aaacgatatt ccaaagctaa tgggggtggac gcttcagtta 180
 gcatctaaac cagcactttt ttcccagttc cgagtcacac ggaccagtac ggcaaagggc 240
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 ttttatggat ttactccca ttatggaacc acacagatgt atgatgct 348

<210> 11647
 <211> 437
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-025-Q1-E1-H1

<400> 11647
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 ggtattggcc ataatttaca agaacattct gtagtattag taagaggagg aaggggtaag 180
 gatttaccgc gtgtgagata tcgcattatt cgaggaaccc tagatgctgt cgcagtaaag 240
 aatcgtcaac aagggcggtc taaatatggg gtcaaaaagc caaaaaaata agtgatttta 300
 gcccttataa aaagaaaacg gattcttgaa cctctttcac gctcatgtca cgtcgaggta 360
 ctgcagaaaa aagaactgca aaatccgac caatttttcg taatcgatta gttaacatgg 420
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<210> 11648
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-025-Q1-E1-H2

<400> 11648
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 attgtccaga tcaagcgtgc cgagggtgaa gcagaggcca agtacctgtc tggcctgggt 180

atcgcccgcc agcgccaggc cattgtggat ggcctgaggg acagcgctct gggctttctca 240
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 tctgcctctg acaactaagc actttgct 448

<210> 11649
 <211> 418
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-H6

<400> 11649

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 catgtgcgtc gctggatcct atttataatc cacaagttac cattattatg gttcagaaac 180
 agcaccacac acgtttgttc gctggtaact atggtgttgg gagcacaatt ttgaaagtg 240
 gaaatgtatt gccaggtagt gtggttgata aagaaatatg ccatcccaact gactttgatt 300
 tttacttgtg tagccatgct ggcactaagg gagtcagccg gcctgttcgt tatcatgttc 360
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<210> 11650
 <211> 456
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-025-Q1-E1-H7

<400> 11650

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ttattagga tgaattgagt ttagttcgtg tgtgtcagtg tgtgacctcg tgggcgctta 360
ataaaaaagca agcatgtgtg gtgatttttg ttgccgtctt tgtgtaagga agctactgat 420
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<210> 11651
<211> 450
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
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<400> 11651

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accatgcttt cttggcatca gaggcataa tcaagcagat cctcgtctc cttggccctg 180
gtcttaacaa ggcaggcaag tttccactc tggtagtca ccaggaatct cttgaagcca 240
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tcaacttct tgtgtcncct ctgaagaaga attggcagaa tgtgaggtgc ctgtactgta 420
agagcaccat ggggaagcgt gtacgggtgt 450

<210> 11652
<211> 465
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-026-Q1-E1-A12

<400> 11652

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ctcggcggag aggtgctgtct ggaatggaag acctcagacc acgagccgac gaagaagggg 360
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 acgaaattag tacaacatag ataaaggacg acatgaataa taata 465

<210> 11653
 <211> 382
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-026-Q1-E1-A6
 <400> 11653

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 gcgcgtagtc ccgaggatac gatttaatac ttctctgaaa aatatttttt tgggtcaaaag 300
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<210> 11654
 <211> 468
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-026-Q1-E1-A8
 <400> 11654

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 tagttcttca aacagatgtg gatccaggat atttgagcta tcaaactgct cgaagtaaga 360
 gcaagcatta tctctgagag atatagcatt cagtatttct cgtaagaact ttagctccat 420

acgacatgag ctgctgcttt ctgatggacg tgttgtttcg gctaaagt 468

<210> 11655
 <211> 388
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
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 <400> 11655

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 ctgatggcaa gaaaaaggcg tacgtgaagc tgacaccaga ctatgatgct cttgacgtgg 180
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 ggtttcttat gttattggag ttttgtagtt gtgacttagc aaacgggctc agtggctcca 300
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 atgctaattt gagctttgcg tttggtgc 388

<210> 11656
 <211> 395
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-026-Q1-E1-B10
 <400> 11656

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 tccaaagggc aacttacgga tgtctcaca agtcccatat ggcaggggca aaaaagcgag 240
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<210> 11657
 <211> 389

<212> DNA
 <213> Triticum aestivum
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ctgatcttgt cagagaagga agagcctgtg aagaaggagg ctgataacgt cttcgcacca  180
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<210> 11658
 <211> 473
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-026-Q1-E1-B5
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agcgcgactt cctatttgct agcgagtgtc gttgagatgt gcgctggagg agcgggtgggg  180
tcctccgggt gaatgtggac tggcttcgtc gcgctgccc actggaatgc ggattctgaa  240
gcatgcttct tagctcgcaa aaaatcactc ggatcggcat ttttcttgta ttctctatc  300
tcgaatgctg ccatttgctc atcggcaatt tttgagcctt tttgaaggca ctctctgct  360
ctctgcctat ttcccgtgac tgtgatcaca cctctggctc cggccatctt caacttgaga  420
tacacgtaac atggtcgggc cgtgaaatga gaatatgcgg gcctgccag aat          473
  
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<210> 11659
 <211> 426
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-026-Q1-E1-B6

<400> 11659

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gtgcggggagg ccactgatgt gggcacaaac cagatgggcg cgcctgggtc cccaggtecc 120

ccatgatgag ttgtgcacac cactgggtcc gtcttgaata ctttcgtaga tgcacaagtc 180

atcgtecggt caaaagtgtg tgtaagctag attactatac tacttcatgc agtttcacat 240

gtatatcatt ggagtgttat gtcattcatt ttgcatcgta tgatttcttg aactatgtga 300

gaagtgtcct ctttctttcc tcatatatag tctccagctc caagcagctt tactttcaga 360

tacattcata gatgaccatc aatacaacgt catagctctt cgacattttc ttataaaaaa 420

cgttca 426

<210> 11660

<211> 284

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-B8

<400> 11660

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aacgtcttcg agcatcttgc atctggactc ctacgcagat gggcctctct aatatctgtc 120

ttctctgtta ttcaaactc ctccgatcat caggttgtca atctacgacc cagggacgtc 180

ccaatcatac ggatagatca ccaaagccac atgtctctga gactttggat aggcatctac 240

cgacatctgc attattaaga ctgccgttac ctctcatca cgat 284

<210> 11661

<211> 400

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-C10

<400> 11661

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ctaccttgtg gggcgacact atttgtctca cgcatacagg gctagtttgg atcgagtcct 120

cgacattgtg cctggaggaa agtgctgcct ggagcctggg gtggtggacc ttttttgcct 180

ggccaggcaa acctgggcat gtatgtatgg ttccatccct gggaggcggt ttgccaatt 240
 agtgactaaa gaacttttac acgatggacc atactgcaca tgactcttga aagtgccagg 300
 caactggcca agcgaatgac acatgacgcc tgagtcacgc gattatcatg agacattcat 360
 cattgtcaaa aaggcgggcg ctcttgagga tccaggctta 400

<210> 11662
 <211> 493
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-C2

<400> 11662

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 gtgtccaccc tggtaggagtg ggtgtcgaag aatcatcat cctgaatgga catccccct 180
 gatttcatt gttctgata acaacgccag agaaggaaga taaacagagt gctgttcatt 240
 catgattgta ccagggaata tgaatggatt ttatttgctt ttggctggcg tatggactat 300
 ggatgggagc tatagaatta ggaacggttt catggaggaa aatagaacag aatcagaatg 360
 tcgttgaaca catcccttgt cagattatat ggtgtttcat cgttttcatg ttgtgcctgt 420
 gactggctcg tgtgtctaa ttatgtcgtg tccttttggc tcatgttgaa tatgctaag 480
 caatgggtgct ttt 493

<210> 11663
 <211> 478
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-C6

<400> 11663

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 ttctacgtct cctgttttga ccgggcgctt ctccaactac aggatgcaat cagattttat 180
 agcaaggatg ttgggtctcc atgaagcccc tccagcgtac gagctcacag aagatcaatc 240

ttgtgactca tctggcatga cctttgcttc tgggtggcgct ggtgtcttca aggtgaagac 300
 caagaaggtg ccgacacttg ccgcacaagt tcaaactttc aagaggcttg tcaaggatgg 360
 ggtcatctca acacatcagc ttcaccactc cgtcgcgctc atcgccatct ccggcaatga 420
 ttacatgagc gactccgaca ttgagactgg cttctacaca agcttcgatg atcttgat 478

<210> 11664
 <211> 201
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-C7

<400> 11664

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 taccgcagc gattcctccc agattcaagt cgggtactgg agtcagcaag ttcaatcgct 180
 attctaacc ccaatgttctg g 201

<210> 11665
 <211> 250
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-C9

<400> 11665

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 agcttggcag atgaagggtgc atttctcaaa tgagtgggtga ctgcgcgagct gtgggtcact 180
 gtaactcgcc ggcataaatc gacgtctccg ttgacggccg cctttttttt aaaatttgct 240
 gaaaatcttt 250

<210> 11666
 <211> 273
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-D10

<400> 11666
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 tctacatcat ccagcgctgc gtcgtcatgc tcctccgctg gcacgactga tcgactccct 120
 cgctccatgg atggatccgt ccttccattc catggatggg gtttgaagca aagatatact 180
 ttttggtttt gggctctgtga ttgtgctgtg ccacaatggg gtcggcacgt agtacttgta 240
 cataagaggc gagtcaaatt atagaagtag aag 273

<210> 11667
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-026-Q1-E1-D2

<400> 11667
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 cagtttttcg tagtttagat cgagtctgtt cttcatatct acagtccacg aaaaagccac 180
 aaaaaaatt tagggtagt tcatcatatc cgaaccaatc tgagcctttg cataatcttt 240
 ttagggtttt tgctttgttg aatttgcggt tgcacgctcg gtctagttgc tgggtctaaa 300
 gtctaattct ttagagtttc gagttctggg cataagttgt cacgccgccg ccacaccatc 360
 atcatcgccc ctgccatcta ccaccaccgc tcatccggca ccgctccgaa ttcgatatca 420
 tataccacca ccaatccgtg tccatata 448

<210> 11668
 <211> 459
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-D5

<400> 11668
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aaaaaaatac tgctgtgttt gcaaattgtg gtcatgaatt caaaaaaagg ttcttgttgt 180
 ttcaaaattc cttgcttttt ggaaaaaaa atcgtaaact gcaaaaaatg tatgtgttta 240
 taattttttt caattttttt aaaaatgttc atcttttcaa ttttgtccat aaattcaata 300
 aatgtcagga acatttcaaa atgtacgcac atttcaaaag tgttcaaaag ttaaagaaat 360
 ttcaagtttt ctattgtcag tcacaaatta gaaaatgttt catgatttcc aaaatattag 420
 aattttcaat ttgtatttgc ttttttaaaa actatttgc 459

<210> 11669
 <211> 389
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-026-Q1-E1-D7

<400> 11669
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 agaatgtggg gaccggcaag atctcagcca tgcgatcgtc gtcgtagttg tactgggtgg 120
 gcttgacttg ctagagttgt agaggaacgc agcttgacgc ccaatcctat tatcaagttg 180
 ggctctggta tgcaacggat gaaacgtctg tgtcaagaac tgttgtctca gggctctgtg 240
 ggtcagctac gtccgatagt ggtttgtgtg tcgtccattc ttcccatggg taattttttt 300
 tcgcaccctg gtgctaaatt agaccttgat gctgcggatg aaaccgggtg tgctgaaatg 360
 agatcagacg ttttgtttcc gataacagc 389

<210> 11670
 <211> 453
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-026-Q1-E1-D8

<400> 11670
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 ccagtgctaa gttggcaaag atatacatga ccaagatcgt atgtttgcat ggagttccga 120
 ggaccattgt atccgacaga ggaagccagc tttacctcga ggttttggca gcagttacat 180
 gaaacattgg gaaccacgct agaatttatt acagcttttc acccacagac agatggacag 240

agcgagagag tcaaccagat tctggaggac atgttgagag cttgtgcact agattatgga 300
tctagttggg atgacaatth gccgtatgag gagttttctt ataacatcag ttatcaaacc 360
agtttgaaga tggccctttt cgaagctttg tacggaagga tgtgtagaac accgttggtta 420
tgggacgaag ttggagaccg tcagttgttt gga 453

<210> 11671
<211> 451
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-026-Q1-E1-E1
<400> 11671

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gcggcatccc catcaaggcg gaacaggatt cggaaggctc ggcccagagc acagctgata 120
tgactgcttt tgtgcaaat cttctagttc agatgcaaac caggttccaa actatgtcag 180
agaacatcat taaaagata gatgaaatgg gtgcaagaat cgatgaattg gagctgagca 240
tcaatgacct caaggctgaa atgggcagcg atggtatgac ccctactaaa gtgaaggacg 300
aagaatcaaa gccagcagac agctctgcct gatttaagca gaagtagcag aagcaagtcg 360
tattagtctt ggttccatgt caatatcatc agccattcat cactaactta atgcatgtta 420
tgagatgtta ttcgcactgt tatatgcatt t 451

<210> 11672
<211> 394
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-026-Q1-E1-E11
<400> 11672

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gggcattgct ggaggagttt tattcaaggc gaactgtcaa ggggttccca ttatcaccca 180
accgcataag gaacgcaaaa tccaggaaca taacaccgat atgaccgaaa ctaaggtggc 240
aagagtggaa caaaacacta tgaaaaaaag ccgagccttc caccctttac caagtatata 300

gatgcattat gataacaagc taatataatg atatcccata caacacccaa agccctgaaa 360
 aaaaaaagcg gccgctctaa aggattcaac ctta 394

<210> 11673
 <211> 407
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-026-Q1-E1-E3

<400> 11673

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 acgcaagaca gaccgagtgc accgcgtttt atagatcgtc acatccaccg gattccccca 180
 tgactgagac tccaatcgca gaagcctaca gacagggata tgtcatgaca ttgccccaaag 240
 ttggataatg gtagtactgt gaatgccgca ttcagcagcc cgcaccaatg tgatattcgt 300
 gtccaatcgc ctgtccaaat aaggggagat ccctagtctc acggttccaa caatgtgcaa 360
 aaagcaccac acctgtggga acatgtaccg ctgtaaattgc acagcaa 407

<210> 11674
 <211> 427
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-E6

<400> 11674

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 agattgaagc atctccatgg gccataaaat agaatatatc atcgggtttt gtgttgactt 180
 cattcctggc cttaaaaaata taggtctccc taaatcgcg tatgaggtaa gactgactgg 240
 aaaatgcaca cttggaatgg actcaataat atgcacggac ggatattctt ggtctcaagc 300
 aactacaca gttctacaaa actctacctt ggtgatccca tatgtcgatg aacacaacaa 360
 tagtctgcgc tccaaacact tggagcagtg cgacgactgg attacatgtg aacacatcat 420
 gactttc 427

<210> 11675
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-E8

<400> 11675

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gctgccagat gaacttaaag cggctctctc tgaccgacat caagattgac atcaagcgga 120
tccctaagaa ggcaactttg atcaaagcta tggaggaagc tgatgtgaag accaagtggg 180
aaaacagctc atggggcaag aagctgattg tccagaagaa gagggctgcg ctcaatgact 240
tcgacaggtt caaggctcatg cttgccaaaga tcaagagggg aggagctatc aggcaggagc 300
tagcgaagct taagaaggag gttgctgctg cttagatcac tttggcgggc agactgttga 360
gcttttggtc agagttgtat ctttgcccca aaatcgtgaa atattgtgcg aatcactcat 420
cactgttatt ggtgtatcag atgaaaat 448

<210> 11676
<211> 477
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-F5

<400> 11676

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gtaatatatt cgataactca aactgaaaaa tggtcgagc actaatatga tttagtgaat 120
ttgattatta tatatagtta ggagatattt aatgatatgc gtacatcgaa gagtggtaag 180
ggtctttggc cgggtgcttc ttctgctata tattcagctc tctcagcgag gtgcgaggtt 240
ccccgagtgg aactccccgag aaatggttca aaacggccgc aggaggggtc ttgtctctc 300
tttccgtgga cgaggacatc tctgtatcc cagtacacat gacgaacatg aggaggcggc 360
gatcgcaccg gcggcgagtt tctagcgctg caaactgcaa gtgagcctcc gaatccacct 420
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<210> 11677
 <211> 457
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-026-Q1-E1-F6

<400> 11677

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aagtggaaaa tgctcatgcc ccttgggacgt tggccatggg attttttatg ttgtgttcct  360
cccgctccgtc catgattcga aatgtgttct gaacacttat gttagaacaa aaactgtagt  420
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<210> 11678
 <211> 455
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-F7

<400> 11678

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ctgctaacag ttatagggtg ccaattgggt tgggtgggca cagatttccc attcggttga  180
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ttgaaattca actatgcac aaagtactat ttggaacca actaagctgg ctgatctatt  300
caactatata tttattcctt gctggggatc tgaagcgta gttcaaattt tgctgttggg  360
ttgcatgatt gcagatgaat gatagcttgc aattggccaa tcagcttaag agtttttggg  420
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<210> 11679

<211> 476
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-026-Q1-E1-G2

<400> 11679

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taccatcct cctcccatgg acggcgtgag atatgcatct cgcatcatca acgatcacga 240
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tacgacgtat actgggtatac ggacaacgca ataatgatat gaataaatat aaagtaaaca 420
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<210> 11680
<211> 467
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB31-026-Q1-E1-G4

<400> 11680

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aagattgtcc agatcaagcg tgccgagggg gaagcagagg ccaagtacct gtctggcctc 180
ggatcgccc gccagcgcca ggccattgtg gatggcctga gggacagcgt cctgggcttc 240
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tactttgata ctatgaaaga ggtcggcgcg tcctccaagt cctcggcggt gttcatcccc 360
catggccctg gtgcggtgcg tgacatcgcc acgcagatcc gcgacggtct tcttcagggc 420
cagtctgcct ctgacaacta agcagtttgc ttcgccggca tgaactt 467

<210> 11681
<211> 246

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-026-Q1-E1-G8

 <400> 11681

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 agattgtcca gatcaagcgt gccgaggggtg aagcagaggc caagtacctg tctggcctcg 180
 gtatcgcccc ccagcgccag gccattgtgg atggcctgag ggacagcgtc ctgggcttct 240
 cagtca 246

<210> 11682
 <211> 455
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-026-Q1-E1-H1

 <400> 11682

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 aactggcatt ctcaactgtt ggaaccccag actatattgc tccagaagtt ctgctaaaga 180
 aaggatatgg aatggaatgc gattgggtgg ctttgggtgc aataatgtat gagatgcttg 240
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 ggagaaacca tgtgaaattt ccagatgatt caaggctgtc tcctgaggca agagatctaa 360
 tctgccggtt attatgtgat gttgaccaca ggattgggtg tgcaagggtc gatcaaataa 420
 aggcccatcc ttgggtccgt ggagttgcat gggat 455

<210> 11683
 <211> 275
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-026-Q1-E1-H11

 <400> 11683

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 ggggaggccc tggagctttt cgaactttgc tttgatggtc gccatctcct cagggtcagg 180
 ccacttcaga tgactgattg cgtgacctc caaggactcg atgaacttcc aagtgatgtt 240
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<210> 11684
 <211> 459
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-026-Q1-E1-H3
 <400> 11684

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 aaaatcttct agttcagatg caaaccaggt tccaaactat gtcagagaac atcattacaa 180
 agatagatga aatgggtgca agaatcgatg aattggagtt gagcataaat gacctcaagg 240
 ctgaaatggg cagcgatggt atgacccta ctaaagtga ggacgaagaa tcaaagccag 300
 cagacagctc tgcctgagtc aagcagaagt agcagaagca agtcgtatta gtcttgggtt 360
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<210> 11685
 <211> 451
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-026-Q1-E1-H6
 <400> 11685

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 gatcctcgat cgatgccaca ggagctgtag ctccatcgat catgaattca tgatcgctct 180
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atccatccaa caaatTTTTg attgcgcaa aagcctaaag gtagcaaagg ctaataagct 300
agccgggatc gatgaaaggt atatctatcc ggcgtatgag actgttaaata atgcgccggg 360
tcgtcttcgt ctaccgctca cccatgtgca tgtgccggag ggaggagggt gccgggtctgg 420
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<210> 11686
<211> 450
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-026-Q1-E1-H7
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cctcctggcg cgccctggtg ggttgctccc tctcgcagac tccccccagg tgcaaccagg 180
gcccatctgc ttccttttgg ccaataaaaa atcatcgtga agtttcgtgg catttggact 240
ccgttcgata ttgatttcct gcgatgtaaa atacatggaa aaaacagcaa ctggcacttg 300
gcactatgtc aatagggttag taccagaaat gatataaat gattataaaa catccaagat 360
tgataataaa acagcatgga acaatcaaaa attatagata cgttggagac atatcagcat 420
ccccaagctt aaccctact cgtcctcgag 450

<210> 11687
<211> 313
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-026-Q1-E1-H8
<400> 11687

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tcacggtcgc gtggcatgag cagtaaaagc actcggagtg gctatgcagg ctcggggcgg 180
aacatttttt gcggctctca cacagctagt agttacatgt catttatatg gcgtttcagg 240
tcagttggcc acttcgggtg attttatgag tatactctta ctgagtcctc caattgtctc 300

aaaagaggga tca

313

<210> 11688
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-A6

<400> 11688

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gtggatcttg ttgaagacga gaacgatagc agaccagcga tgccgccacg acgatgccgg 180
gaaacgatgg atggatgaga cagcacaggt aagcacctta ataccggtat ctgcaattct 240
gcatcgtttt tcagaaacag aactagcaat tctttccggg caccaataga agcatatcga 300
agtgttatag agcgtgcaat tgaaggagca tcaaaacttg ggaaacagtt gttttccaag 360
cagctgttgg cttaagcaag gaaatggcaa gtcgtttgcc gtgtttcagg aaaaatccga 420
gc 422

<210> 11689
<211> 366
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-B10

<400> 11689

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catctgttat ccatgcaatg cacagagata atgctcctgc tcacgcatgc attggtatgc 180
ataagaatgc tcctccaatc aatgaacgcg atgcgattga agtactggga aaaaagacat 240
cacacgtaat taagccaatc tggggctaata aataataaat caggactcct ccagtccgtg 300
gccctccggc cattttaaga tcttagtaat taaactaggg gaattcacgt gctagatttg 360
ttgcaa 366

<210> 11690

<211> 411
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-027-Q1-E1-B6

 <400> 11690

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 gaaacggaaa aaccacaact caaaatctca aggacaaaag tcaaacgatg gtagtgtaat 180
 cgggtggtggt tttgtggaag ctcaatggga ttgcgaaaat gcaatgattg gttttgggac 240
 gcaatgcaga agtggagggt aagggtggtga actatgcacg gtgtcggaat tggaagcacg 300
 gtccctaagt agccgaaaca ccttaggaga cgcagctcac aacacaaaca aaattggggt 360
 aagttagggt ggcggaagtg tatggtgggt aagcctatac ggaagttatg g 411

<210> 11691
 <211> 353
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-027-Q1-E1-C11

 <400> 11691

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 catatgaaaa atatccagga agagaatcca ggtatggtgg caaatcttat cttcaciaag 180
 gaacaagatc tcggtcttga agatctgaac aagctcttca gtgagctctc tcgggtcgaa 240
 aaagacatta gattccggct acctccattg catggtcgcg aagacaatat tgggtggcaca 300
 tgtgtggcac aagatctgca actaccaagt gttctaccgg cggatcattt ggg 353

<210> 11692
 <211> 440
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-027-Q1-E1-C5

 <400> 11692

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 tagaactaat cttggcatat gtatctgcat gtgttttttt gttttgcatg tagctagtgt 180
 agtcatatcg tcggctgtac accggcaaga tgtacgtgtg atacgtacgt agacagcgag 240
 ccgtcggccc aagaacgtgc atgggtgagat gctattgtcg tgcgaggcgg cggaagtgcg 300
 agatgccgag tgccgtgtga agcagctgca caaggataag agccagcggc cagcaagagt 360
 ccagccgagt cgattagtaa gtctgttgtg gccttgagaa gaggtccagt attagatgtg 420
 gtcaagtttg ttagctgcat 440

<210> 11693
 <211> 331
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-027-Q1-E1-C6
 <400> 11693

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 ttttgcccc cggccgtggc tttcttacac acctgcaagg gtggcccgat aacctctcag 180
 ctccaccacc ctgttgtgtc acatgaatat ggcaatgggc tacctatgga cagtggatcg 240
 gattggggac acgggaatac agtggccaga tcgtccttcc tgaagctagt cacgttgtga 300
 accgattctg aaagtgggga ttgaggggat a 331

<210> 11694
 <211> 342
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-027-Q1-E1-C8
 <400> 11694

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 agccaggtgg gggacacgcc aacgctgttc ctggacatca tccagacgat cgggtgcatg 120
 gataacgacc acatacggga agagtaccag aaaggtggct gctgcgggtt tggcaaaggc 180

aacttctccg agctgttcaa gtccattgca ggattatgac aaatcccttg aaccctagca 240
atctgctgca gttcatgcat cataggatag aatctggaat tggaacctga tacgctgac 300
cactgcattc tatcatggtc tcatggagca tcaagaacgt tc 342

<210> 11695
<211> 317
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-027-Q1-E1-D11
<400> 11695

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tcgcctcaag aaggacgacg acgacgagga ggagtgaagt gctgttactg aacatacaac 120
gatagtcggg cagggagcca gggaggatcc agctgaactc ttccctctag cttatggtag 180
ctttgttgat ggcacatcc gaacatcgtc cgtgttttta tgtttcggtg ctcagtgttc 240
ttcgtgggaa ctcacccagt gtgtattcct tccgtgttaa ctttgtcaaa tgcaaacaga 300
cctgagaata aattcca 317

<210> 11696
<211> 266
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-027-Q1-E1-D4
<400> 11696

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tgggtcaacga gtggtgacgt gtacaacgga ggagtcaccg gattggcaat ttggggcggta 120
actctcgccg gatttcttgc cggaagtgtc cttcttgtgt acaacacaag tgctttggct 180
cagtaaattct taaagttgtt atcgcatctg tacacatgtt tctacaaatg tgtcggtgtt 240
gttcccgttc tcgctaaggt ggtcaa 266

<210> 11697
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-D5

<400> 11697

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ggacttgaac catggtgggt tgataccacc ttgctactcg ctgtagcgtg gtcgaaccac 180
cttctctttc cccgtggttc actcgaatga accgacatgt cttagttgca gcgccggctc 240
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cttggttttt ggaaattttg agccgatctt ctgggggaga ttagtgtgct ttccaaagtg 360
ggattccaga cgatacaca atgctaagac aggggaaagg attcccctct tagcctgcaa 420
tagtgcgctc aggggtagtg cgagcccaat 450

<210> 11698

<211> 309

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-D9

<400> 11698

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gtggagttgc cgcccactga gatagcagca tcgctgcaca tgccagctca atcgcaatcg 180
cgatacgagt gttgcacatc ccattcacta cccttggtgtg ttgtgtgccc atacgcactc 240
tctatacgat ggaggcttac gtaggcgtgc agtcgacgtg atatctcttc taaagtgtca 300
cgtaaattc 309

<210> 11699

<211> 327

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-E10

<400> 11699

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 tctctctctt gtagtacct acaatgggtct ctgggagatc catatgatgt aagccttttt 240
 gtgggtgtgtt tgttgggac cgatgaactt tgagtttacg atcagatcca tgttttttagc 300
 gatgagagtt agttgaatcc tcgttga 327

<210> 11700
 <211> 350
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-027-Q1-E1-E7
 <400> 11700

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 cagggcctcc tggcgcgccc cgggtgggtt tctctctctc ggcaactccc ccagggtgcaa 180
 ccacggccca tctgcttctt tttggcccat aaaaaatcat cattaagttt cgtgccactt 240
 gtactccgtt tgctattgat ttctgcgat gtaaaaaaca tgggagatag acgaactggc 300
 attgggcact atgtcaatag gttagtagca tcacatgata tctaagtact 350

<210> 11701
 <211> 424
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-027-Q1-E1-E9
 <400> 11701

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 gcatgcatgc aatgtttcgg catgtcatgt atgggccatg gatgggtcac acttacatca 180
 tcgttgaact ttcgagtttg atggatatga gtacgcagat gagaaatgaa agatcacata 240
 catttgata agtctttatt gattgtatgg acataaaata atagaataaa aatgtatttg 300
 tacaattggg attgcccatt ataggaggaa aacaaggcaa acaactttac acaagtttca 360

ccttttgtaa cacacaagta ataaacatat actccctcgg tccggaaata cttgtccgag 420
 aaat 424

<210> 11702
 <211> 411
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-F1

<400> 11702

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 gcttacaaaa cggtgcataa ggctttaccc atgttttagac atacaacaca ctcacattgg 180
 ctcaacaaca tctaactgta ctagctctaa gaactaatta caaccctgtg tccagcagggc 240
 acacatcaac ggctctgaca aatccagggg ttcaacaccc atgtgtgtca aatgcaagca 300
 cagctgattg catcatgctt ataacttcat atcggcgcggt ttggacactt tattctccca 360
 gatgaacaac atctgttgct gttcctaaaa ttcgtgtgtc aaatctgagg g 411

<210> 11703
 <211> 344
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-F11

<400> 11703

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 aaaagtggtc ggggtccgag ttacgtgttg aggatggagt tacaactggg acaaaaatgg 180
 gccaggccaa gttgcgtatg aacagtgcac tcacaaaaaa atcgggcttc ttacacatta 240
 cggttagact tgccagaaaa aggttggtgc ctgtcattgg agagtttaaa agcatattca 300
 tccgcgggggt tactctgcgc caacgacaaa gaggaatgag acag 344

<210> 11704
 <211> 404
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-F3

<400> 11704

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atcagagaaac tccgccgtgt tcgattcagc cgagagaagt tcagcgagat gcacgctagg   180
ctatgggtggg aagagaaccg agcgaggata catgaacagt acctctgaga caggagaaga   240
agaagcacag atgagaacaa taccggggac ttcgccgttg acatgagcca gccgtccatc   300
catgttgtac atttgcagtt tgagctaaca ttactcgctc tgggcagcgt ttgtgaggtg   360
aaggcctcgt cttgagaaac tgaactatag tgatctgcta ggct                               404
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<210> 11705

<211> 296

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-F5

<400> 11705

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tttacagttt ttcatagttt agatcgagtc tgttcttcgt acctacagtc caggaaaaag  180
ccacacacag cagagatggc tagttcatcc tatccagacc agtctgagcc tttgcataat  240
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<210> 11706

<211> 303

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-F7

<400> 11706

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tttttcgtag ttttagatcga gtctgttctt catacctata gtccacgaaa aagccataaa 180
aattagggtt agttcatccc atccgaacca atctgagcct tgcataaacc tttctgtatt 240
ttccttggtg aatttgcggt tgcacgtcc tgtccagttg ctggtcggaa cgtcgagtcg 300
ttt 303

<210> 11707
<211> 341
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-027-Q1-E1-F8
<400> 11707

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aaactaacgc tagtttagtc ccacctcgtc gatcgaaggc gacgatgacc agtttatata 180
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tgggcctggt ttccacggcg tgctctgaaa cgctgttgt agtcgcccgg tgggcttgat 300
aacaatggtc ttattaagac acgctgtgga gacggacggg c 341

<210> 11708
<211> 351
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-027-Q1-E1-G12
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agatggaaca ctgttcacc tcaggaccac tccagccagc acctgtcca gaatgatggc 180
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cgtgacgaga caacaacgat catgcctcca catcgaaaca atgtcagcga tttcgtttga 300
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<210> 11709

<211> 370
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-027-Q1-E1-G3

 <400> 11709

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 tcgtggtgca aacccaatcg tgaattgttg ttaccttaga tgtggtgtgt ccaaattgca 300
 gccatgacac agatttgttg tatcttgaat gtgtgtgtaa atgctgggcg catttgcttg 360
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<210> 11710
 <211> 396
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-027-Q1-E1-G6

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 ttctgaagga aaaaccttct gtgttactca tgctgatgtg ggtcttgaca ccaactgctgt 180
 ccgggaagca gttgtcaaag ccatgaaccg tttcaagggt ttgccgataa tggatttcag 240
 cacagatgag gcatcaaaca aggctgttat ttatgccggc gtacctccgg atgcacccaa 300
 tggcttcaag gtgttggtgact ggcttacacc ttcaatcgca tcaactcaatg gaaaatgagg 360
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<210> 11711
 <211> 427
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-027-Q1-E1-G8

<400> 11711

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cgaaaattat gaaactaaat caaaagatgc caaacttagc tgatacatca tttagaatag 180
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taaacaaaac caaaagaaaa attgagaaaa acaaaataaa gtgagtgtag agagtagcga 300
acaggaaata tctggaaaaa aaatgctcgc cgctaactct ttcaattatt ccccgagacc 360
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agttcag 427

<210> 11712

<211> 343

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-027-Q1-E1-H3

<400> 11712

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ttccgtttat tatgacacat ttcattcattg tcatattgct ctttgcattga tcatgtagtt 180
gacatcgtat ttgtggcgaa gccaccttca taattttcat acatgtcgtt cttgattcat 240
tgcatatccc ggtacaccgc cggaggcatt cacatacaat catatcttgt tctaactttg 300
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<210> 11713

<211> 325

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-A1

<400> 11713

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tccacatatg agtcgtttcc atagatatc gaatcggat aattgtatca atgccttctt 180
tatgtgatat atgcgtgtta ttgagcgtgt ggactgtatg ggcgtctata tccatgatca 240
atataacttc caacttctgc ttcgaccaag agaaaggagg gagaggagga gaaaaagcg 300
ggcgtcttag aggatccaag cttac 325

<210> 11714
<211> 440
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-A11

<400> 11714

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cacagagaga gctttttata gcgaccaagt atgggctaca tatgacagtg aggatggaat 180
gcctcgtcta tatgcaatgg tgcagaaagt tctttcaatg agacctttca gaatccgcat 240
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tttccagaaa acatgtggcg attttagggg tggaaggtag cagattacgg aaacagtcaa 360
catattttcg cacaaagtca gctggactaa agggccccgt gggattatca gaattattcc 420
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<210> 11715
<211> 396
<212> DNA
<213> Triticum aestivum

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<400> 11715

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agttctcttc cgatgcgtgg tggggagatg ggggtctatg ctgggaaggg agattgggga 180
ctggcggtta gagctcaggc aagacaaaga acggtggcaa ggtcaggagg acgaatttgg 240
ggatgtgagg ccagccggga tttaccggac atggggtgga gcggtgacct ccacttggat 300

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ggacgggagt gtacagtagc cttcgcaaat gcacca 396

<210> 11716
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<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-028-Q1-E1-A5
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ggttcagaaa gaacaccatc aagagtgaaa acagaaccag aacctaagac taaaaatgaa 180
aggaacagaa gacattgaa 199

<210> 11717
<211> 264
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-028-Q1-E1-A6
<400> 11717

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gcaacagcag cggcgtgccg cctggctctt ctttttgtcc tggagatgtg cttattgcta 180
gactctgaca gatgaattgc gtttctctcc gcaagtaatt tgagtccttc agcatgaaag 240
tgatcgaggc accgacttcg gccg 264

<210> 11718
<211> 422
<212> DNA
<213> Triticum aestivum
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<400> 11718

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tcattgggttg aagatctata caaacggaga cagccattgc cttcactgga tgctatatat 180
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ag 422

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<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-028-Q1-E1-B1
<400> 11719

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acattgagtg tacgtatgac atagagtgga gcatgtcag 99

<210> 11720
<211> 429
<212> DNA
<213> Triticum aestivum
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<400> 11720

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agtgaaca 429

<210> 11721
 <211> 434
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-028-Q1-E1-B7

 <400> 11721

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 gacgccaggc taagatcacc ggagagatcc ttgagatcgt cgctggcgcc gacgcctgt 360
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 <211> 421
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-028-Q1-E1-C10

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 ctaccatcag tttgtgctta cttgctcagg catacaatca tgcgagttct gttattcagt 300
 ctctgggaga agaagacata aatgtgaagt ttctggtgca gcttgataaa ttgatccgtc 360
 tattagagac tccagtatct gcttacttgc gtttacagct tcttgagcct ggaaaacaca 420
 c 421

<210> 11723

<211> 436
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 <223> Clone ID: LIB31-028-Q1-E1-C12
 <400> 11723

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 ctcatgggga gatggggtgc tagtgatggg ctatgggtctt gtacagacca aagagtacag 180
 caaccaaagg aaatttatcc agatgttttt ccttgccgct catgagaaag gttactttgt 240
 gctcaatgat tatttccact ttgttgacca agaacaagtg caacctgcac acgtgagagc 300
 tcacgaagcc tttagacca acatggcatc caacacagtc caaacaagtg cggagtacat 360
 tcatgaagaa agtcaaaca tgcaagctgt tccagtaaca tctgaagaaa attatgctgt 420
 tgacagttac acttac 436

<210> 11724
 <211> 401
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-028-Q1-E1-D11
 <400> 11724

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 actcctggcc ctagtgttcg tctggtagaa aatctttagg aggaccaact cccgctcctt 180
 ctcttgctcc agatccccga ggtggtagtg gtgcatcacc cagttgggtcc tctgctggtg 240
 tgcagcacca gaaccttttt tgctgcccgt ctgccggccg ttgaccatca tcggcaatgt 300
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<210> 11725
 <211> 342
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-D12

<400> 11725

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gttcttagaa agaaagtcct tataagcata atttcaaaca atatgaagat caacattaat 180
ccactgggtt acatatacct cgtagcagca gtttagagta gaccgggttt gagaaatgaa 240
ccttttttgg atagttttca cttttattag tttagggttt accttttctt ttttgtctcc 300
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<210> 11726

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-E1

<400> 11726

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gaagatcttg tgcattcatt tgttacgtac ttcgattagt tttgatggtg aactcgtaaa 180
gogtcaggga cacgtttctt ttcttttaca tctcaattta tccccatttg caggaggcac 240
attcaccact ggacagggac ctggaccttc agctatgaac gtgcaaggat atgacacgcc 300
gtctctccaa ttctatcggc aactaaatgc agacatgcc attaatatgt ttctactgg 360
tgggaaactca tcaagtcagg cacctaagga tcaagtagca aatgggtggtg tccagtcact 420
taatgaggga aatgctgatg tg 442

<210> 11727

<211> 451

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-E11

<400> 11727

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 taggtgctta ggcaaatgct taggtgcgta cgatgtggta gatgcattgg aatggagggg 240
 tgcctttata tgagtgcaaa ctgtgttgca ttcacatcgt gctgcctctc ttttcccagt 300
 cctcccatta cttccccttat gcattcgcat gatgctaatt gaaggaggat gcatcattgg 360
 tcgttcaaca tttcaggaac agctaccctc tcctcatct gcattatagc tgtattggga 420
 actgcgtcgc ccgctgtcaa atcaaatagt a 451

<210> 11728
 <211> 457
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-028-Q1-E1-E2
 <400> 11728

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 aggaagatga tacgcctgtt ttagaagacg agcctggaac taattctggg cctcaagaaa 360
 aagagatagc acctctaaac aatttaagca gcgatataat ttctactacg gttgctgata 420
 catccaataa atcaatggat aaacttgact gttcagg 457

<210> 11729
 <211> 444
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-028-Q1-E1-F10
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 atcacccgaca acgcaagtca tatccggcca gccgagaaac acataactatt tccgtcgtga 240
 gatttttccc gtatatcatg cacgtctaaa gctgggcaga tcgaggctac aagttaaatt 300
 gctttttttt cctctttttt ctaattacca gtgcaaatac atgagtggtta gtactctttc 360
 cgtttcaaatt tgtaattcac gtattagatt ctgttgggtt tttttacttt aattggtttc 420
 accttttttt tttcactcca gaca 444

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 <211> 373
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-F12

<400> 11730

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 caaaaagcaa tggcgggttc aacacaaaaca ctgtcggagt cgcagctcat catgaatgga 240
 aattgccagt catagcaaaa attgacgaca attgcagcag aatcatcatc gtcgccgtga 300
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 aaaaatcatc acc 373

<210> 11731
 <211> 414
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-F9

<400> 11731

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tcatacagtt cagtcaatctt cttcagttac agagacggag ttcttctggg ctctgaggaa 360
tttgtcctga ctgaggagtt acgagttcag cagtgcggat tgcttacaca gtga 414

<210> 11732
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<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-028-Q1-E1-G1
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cgccca 426

<210> 11733
<211> 399
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-028-Q1-E1-G12
<400> 11733

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gatcgagtct gttcttcata cctatagtcc acgaaaaagc caaaaaaaaaa ttaggggttag 180
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399

<210> 11734

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atacttgtgg gaaggactta tttctatctt tatacgcttc ttggtgccac tctccaatgg 240

ctaccatcag tttgtgctta cttgctcaag catacaatca tgcgagttct gttattcagt 300

ctctgggaga agaagacata aatgtgaagt ttctggtgca gcttgataaa ttgatccgtc 360

tattagagac tccagtattt gcttacttgc gtttacagca tcatgagcct ggataacaca 420

cgtggc 426

<210> 11735

<211> 361

<212> DNA

<213> Triticum aestivum

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<400> 11735

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ccctactctt tctgtcagac ttagtaccat gactgcatgg tcggggcatc atgggtacat 180

atgtgtgtga gataactcaa ttatcatggt atgtgtgtat gtaggaactc agcagtgaac 240

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<211> 361
<212> DNA
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<223> Clone ID: LIB31-028-Q1-E1-H10

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<210> 11737
<211> 418
<212> DNA
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<223> Clone ID: LIB31-028-Q1-E1-H12

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<210> 11738
<211> 335
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-H5

<400> 11738

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actagtctct tttttccgaa ctgtggctgt agtgggtcttg tgtaacatca gattgttgtg 240
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<210> 11739

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-028-Q1-E1-H9

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<210> 11740

<211> 282

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-B6

<400> 11740

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aatatgtact tgcataaact aaatcatgac tcatttttaa tcatcagctt tagaccatat 240
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<210> 11741
 <211> 309
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-029-Q1-E1-C4
 <400> 11741

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 cttgctaggt atggaatagt cgttcttgga aaccctaaag ttctaagcaa gcagcctctt 180
 tggaatagtt tgttgacaca ttacaaggag catgattgct tggtaaaagg acctttgaac 240
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<210> 11742
 <211> 362
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-029-Q1-E1-C8
 <400> 11742

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 taaaacggat cggacgacgc aattcctgct atgttctcca gtgtgtttcc agacctcttg 240
 tgttttatgt gaacttgtgt cctccctggg gtatcctgat tgctgttgcg cccgtttgta 300
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 gc 362

<210> 11743
 <211> 300
 <212> DNA

<213> *Triticum aestivum*
 <223> Clone ID: LIB31-029-Q1-E1-D6
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tgtcgcggaac ttagtgctaa ccaactgaag acatcctgtc catcttggct ccgtacataa   180
atatggttgc atcctctgac tcgattatat acgatcactt gtaatctagg taccaggcta   240
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<210> 11744
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 <212> DNA
 <213> *Triticum aestivum*
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 <400> 11744

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caagcatcac tggactagga ggtgtaaatt ctgttaatgg gaagcgggtg acatcaagaa   180
gtgctttgtg caaggtggcc taagctgttc atccatgccg acaacttgcc caagaataat   240
aaggcgccct tcaatgtccc ctctcatcg ttgggattct cagcccagcc gttgtttctgt   300
accctgcat caggctacat ggaatatgct aatttaggga tctgtgaagc taatccccta   360
gatgttcctt aactatctat ccaggaagtt tagtacctgc catatatgtg tgttaccagg   420
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<210> 11745
 <211> 402
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB31-029-Q1-E1-F2
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<210> 11746
 <211> 439
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-029-Q1-E1-F8
 <400> 11746

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 tcttcttctt gctcctgta accagcactg catcacctcg tggccttaat gttttattag 180
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 gaattagaag agagaaacga gggagaagag ctagctgtag cacagacgct gttgtcagat 360
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 gcagtcatat gtctaatac 439

<210> 11747
 <211> 388
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-029-Q1-E1-G1
 <400> 11747

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 tccaatacct gcccggtttc tctttcggcc tgctaaaggc ccacaacaca gttgggcat 120
 ttacaataca acctgacttt cggcctotta gcggcccatg ctcttcatgg tccaatacaa 180

gtccgctgtc tctttcggcc tgctaaaagc cgacaatatg gttggggccat atgtacaccg 240
aacttattaa cggcctgtta atggcccgtg aaatcaaagt ggccacatg ttgcccgtt 300
tgatgtcagc ctgttaacga ccccggtatg aagacggccg atcattaaat ttccggcctgg 360
tttgtcccaa agaaaaatgg cctggtaa 388

<210> 11748
<211> 436
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-029-Q1-E1-G3
<400> 11748

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ggatggcctg gaacaatatt tgaagaagac cccgtgcagc gttgacgcct gcgattacct 180
gcagactctc aagatgcgcc tccacggtat gattcacaac ttctgcatca aggcgctcaa 240
gctgctgccc acaccatcgg gctcgttat gtgtggcttc ctcatggccg gccactgcta 300
cggtccatg gaccctgtct ctaacatcat cgtcaactcc atttggtaca acttccttgg 360
cggctctctc ccagcgtctg aaggcagcaa gattgagcaa tacaatgaca tacttgacct 420
cctatctctg ctccgc 436

<210> 11749
<211> 433
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-029-Q1-E1-G4
<400> 11749

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cagatgattc ggatggtatg gacgacgatg ctatgtttcg tattgatcct tatattgcga 120
ggattttcaa ggagcgcaac aaccttctg gtagtgaaac tcagcaatct caacttatgc 180
gatttaagct tcgctgtctt actttactgg agatatatct tcagaggaat ccaggaaaaa 240
aactggtgct ggaggtgtat gctttcttaa tgcaagcttt tgtgaaatca catagtgccg 300

atggcaatga gcagttcagg caacgtattg gtggtatatt gcagaaaagg atattcaaag 360
 caaaagaatg tccaaaaggg tttgatgtcg aacttagtaa acttgaaagt ttgctgcana 420
 aggctctgca tct 433

<210> 11750
 <211> 468
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-029-Q1-E1-G7
 <400> 11750

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 tgatggatat acattcactt atcatgtccc tcaatttcac ccaaategag ataaaaactg 120
 ccaactttgc caactcatgg ggagatgggg tgctagtgat ggtctctggt cttgtacaga 180
 ccaaagagta cagcaaccaa aggaaattta tccagatgtt tttccttgcg cctcagggga 240
 aagggttactt tgtgctcaat gattatttcc actttgttga ccaagaacaa gtgcaacctg 300
 cacaggtgag agctcaggaa gcctttgaga ccaacatggc atccaacaca gtccaaacaa 360
 gtgcagagta cattcatgaa gaaagtcaaa caatgcaagc tgttccagta acatctgaag 420
 aaaatgatgc tgttgactgt tacacttact ctgaggcacc acagcaag 468

<210> 11751
 <211> 370
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-029-Q1-E1-H5
 <400> 11751

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 aggacgcggt acgtctcttc ttgcagcgag cggcaaacga cgaacctcgg tctcgaatca 120
 tgtcatgggt tgtattctcg gaattaaatc gcactgtcaa gaaaagagtg acgcagctca 180
 tgtagatgag cattaagagt tttttttttc ctttgtcggt taagagaatg aatgaaacca 240
 gacattttct tgagcagttt gttgaactga gaatatgttt gttgcatccc gtccggttga 300

ttaataaaga gatcatatat atctgttgta aaaaaaaaaa aaaaaaaaaa aaaaaaaag 360
cggccgctct 370

<210> 11752
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-H7

<400> 11752

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gtaataaact taattagcaa aatattcact catctcttat cgcagtcctg ccgtcgctgt 120
taatcaaccg gcggaaatcg tcgtggaatc atttttgttc tagctgattc gtgggtgttc 180
attcatgtgt gcatagtgcg agcacaaatc cggcaactgt ggtcgtggcc agtcggaaac 240
gaagttctat ctaacaaatc cggatgactt caggagcgc tcggtatgtt caatctcaac 300
gtaccacggt cggcatggcc taaatttggt gacatatacc gtctgttgct acattatcta 360
tatatttgca tcaaattctt gttacgttat atattttcaa gtctatattt ttgtactttt 420
c 421

<210> 11753
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-029-Q1-E1-H8

<400> 11753

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gccaaagccg tggggtacct gattctcgtt gctaccattt gtgccgcatt tgcagaccg 120
ctcgttgatg ctgtccacaa cttctctaac gccacacaca tcccgtcctt ctttgtctcg 180
ttcatcggcc tcccgtggc aaccaattcc agcgaggctg tctcggccat catcttcgcc 240
agcaggaaga agcagaggac ttgctccctt actttctcgg aggtgtacgg cgggtgtgacc 300
atgaacaaca cactgtgcct gggcgtgttc ttagcgtca tctacttcag ggagctgacg 360
tgggacttct cctcggaggt gctcgtcatc ctgctcgtct gtgtcatcat gggcctct 418

<210> 11754
 <211> 454
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-032-Q1-E1-A5

 <400> 11754

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 tacaagatgc tctgtcagct cctcttggag cttctgctga ttttgacgag gatgaactgg 120
 aagcggagct ggaagagttg gagggagcag agttggaatc ccaactactg gagcctgttg 180
 taactattcc tattcatagc acgcccgtcc caggcaaggc gcaaccaact cgccctgctc 240
 cacagaaagc atcggctgag gaggatgagc ttgctgcact gcaagctgaa atggcattgt 300
 gatcaggccc ccagtgaatg aagaggtgaa atgtacaaat gattggctgg acggtacgct 360
 gtcgcaggcg agtcctggct acacatatat ttgcccggtg gtataatctt tgggtgggaga 420
 catttggcga acagaggcaa gaaaggctgc tcca 454

<210> 11755
 <211> 452
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-032-Q1-E1-A7

 <400> 11755

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 taacaattca tcacaacggc aaagtatatg gcataaactt tcttggtagc taataaacta 180
 tgttgttagt caacagtgcg attgcagctc atcgtgtttt taggcagggt cgcattgttag 240
 agcttttggt caacagggtc acatactcga ctatcgttta gtcttctatg attgctaaca 300
 ctcacatata caaatatagc tagcgtgtca gccagacaca tagaaagata ggggcttatg 360
 atttcacctc acgattcatt tacctcaagg gtaatgtcaa cagtaataac tcattatcac 420
 tcagactcaa ctggatacat gtgtcgacat ct 452

<210> 11756

<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-B5

<400> 11756

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tgtcccaaga tttgccttta ggatgattag attgcttggt ggtatgtgag gtgcaggaac 180
ataaactttg gctgtagtgc acgatttaca ttttttactg gaaagtcaaa agcttctgaa 240
acttttcgca caatattggt ataaaaattg tttattttgt cctaattttc agaatttttg 300
gagtaccgga agcatggtag atgttcagat tactacagac tgtcatgttt aagacatatt 360
ctgcttttga tgcattgttt tgcttggttt gatgaaacta tcgattctat aggtggtata 420
agccatggaa aagttataat acagtagcta caa 453

<210> 11757
<211> 446
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-B7

<400> 11757

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gaggcgatgt tgtttggcat tagctacaaa atagccatga tgttcctctt taagccctgg 180
atgggaaatc tgttgcaagt gctcaagggg tgttaagagc atatgcttcc caaggccaac 240
attgtgatgc atgtgttggt agtttagaag tgttttggtg tagcaacacg agctgacatg 300
tagtttggtc tgtagttcat tgtacatgca agttgaattg tcctgaccat tttatgaaac 360
ttaatttagc tttttattgg attgcagggg ggtatgaata tgcgtatga tgaataattt 420
tgaattatgg ttggtataaa tccaaa 446

<210> 11758
<211> 465
<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-032-Q1-E1-B8

<400> 11758

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ctctgggtttg tgagaagcat ataccctaac ctaccccaaa tgggacaaaa aatttaccac  180
agcatgttga tgccgctcaa tgatagcatg caaagtttca tgaatttttag acgagttttg  240
gatttactag aatttaaaaa ccaggcatct caatgttttg ccgacattca acggtgcctt   300
ggtgtttgaa attcattccc atttctttca tgggacctaa gcatgcaccc aaggacaaag  360
atgttgatttt tcaaccaact tctatgcact ggagcatgtg catgtagtgc aaacttgaat  420
tacgcacata aatgcacga aatctcactt aatgcataaa aatgt                               465

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<210> 11759

<211> 466

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-032-Q1-E1-C7

<400> 11759

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tggggctatc catgcccatt ttgcaaccaa aagcttcac acacgtataa aagtgttctg  180
gcacatgcaa gaggacgagc cgttggctcc ttcaagcaga tgtattctcc cagggtgga   240
cacatcgctg aactgagta cctagagaag cttcaggatc atgccgacaa atgagatgag  300
atgtgggatc gaactatgta tggctatgta gtgtcttaat tataaatgcg cctgagtatg  360
cttaatgacg gttgaactat atacttatgg ttacctatg cttgtgtacg cttattacct  420
atgtctgagt atgtttaatc tatgtttact tgtgtctaaa tgtggg                               466

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<210> 11760

<211> 454

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-032-Q1-E1-D5

<400> 11760

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gttttagatcg catctgtcat tcatacctac agtccatgaa aaagccacaa aaaaagttag 180
atctgttcat catttatcca agccagtccg agcctttgca attttctatt cattgcttgc 240
atagttgaat tatcgggttc atcgtcgtgt cagttgctgg tcttagtgtc tagttccttt 300
agagttttga gttctgttca cattagtcac gccgccgtg tatcattatg ctttcgctg 360
tccaccatcc catccattaa cttccaccac gtgctacgca ctgttcattg tcataatcat 420
agttgaggtc attcacatct tcgcctgac caat 454

<210> 11761

<211> 443

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-032-Q1-E1-D6

<400> 11761

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cgcccgcatc ccattctagc cggacatagt tcagctaagg ttctcctgac aaggagagag 120
accttaatga atttagcacg tccccgaagg gtgagtgtg aaagatgtcc ggggaggtga 180
actccatgat cggcgcccag tcggactcga cgagcacgga tatgagcggc tcggagtccg 240
tggctgtaga tgaatacagt ggtttggcga tacgactctc gtaaggggta aagtcagcat 300
cgggtcccat cgccactgag agtacggcct ccatgacggg gtccatccct tcgctctcgg 360
atggcgcgac ttgctccgga tcgatggacg gagtatcttc ggatgcgac tcncgaatac 420
tgtccgacag cagagtggcg tca 443

<210> 11762

<211> 448

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-032-Q1-E1-E2

<400> 11762

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cgggttttaa atccaagctt atctgtttgg ccacccctac ccgtgggttg ccagctaag 180
ccgtttgaac tatttatgta tctatattgt catgccttgg tacctcccta cctgttgtag 240
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tagttgttgc tactaaactt tctcactccg ctgtaatgtt atatattgtc tctggaagtt 360
taagcttatt ggtaatgttg ctgctacatt gttatgtagc atcctccaaa anaaaaaata 420
aaaaaaaaaa aaaaaaagcg gccgctct 448

<210> 11763

<211> 469

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-E5

<400> 11763

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cagcgagcat gggcggcggc ctcgccattg atttgatata aactagcgtt agaccaactg 180
ttagcttcgg ttttttagac ttgatgaggg agaggctagg gggaatgcca ttgctgatt 240
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tgactctctc tctctggtag tctgatgatg tttgtaatct gccttgagct gcgctgcttc 360
tctataacga tagggcgata ggccggctgc gtgactggca ggtgccgtct aatttttggg 420
aatcgtagta agtttgtcat gtgtcaggat tgtgtgatct tggtagggg 469

<210> 11764

<211> 457

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-E8

<400> 11764

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tcagaagaaa tatacacggg agccatcaga gaggtgcacg aagaaacagg ggttgacact 180

gaattcgtgg atgtgggttgc cttcaggcac gcgcacaacg tggcgtttca gaagtcggac 240

ctgtttcttca tctgcatgct gaggcctctg tcgagcgcga tcaagatcga cgaaacagag 300

attcaggcag caaagtggat gccgctggag gagttcgtga agcagccggt catccaggag 360

gaccacatgt tccagaagat catggacatc tgcattccagc ggctgaggaa gtgctactgc 420

ggcctcacgg cgacacaacgt cgtctccaag ttcgacg 457

<210> 11765

<211> 451

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-F2

<400> 11765

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cgccacaaaa gccaaagctta aacgaattcg gaggaccatc ttcttttggc tctcaagggt 120

agaagctctt cgtctcagca aaaacaaaga aaagaactcc accacatatg agttaatttg 180

catgccaaac aagctcaaag caagaaacta caagcaatgt ctagtaggcc gagactaagc 240

taaaaaagtg taatgtatgt gtcccatagc atgcacacaa cataacaaat agctctcaat 300

cagttatcta atccccctcc tagtttgcgt tgtttcaaca acaaaaccca tcaaaaggat 360

cgtgatagtc acaatcaact cgatccgttc aaactgcaga gttttcttgg taaattacca 420

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<210> 11766

<211> 468

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-032-Q1-E1-F7

<400> 11766

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ggcgtggggc gtgttcaagc tccggcaggc attgaacccg aagagcgctc tgaaacccac 180
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gtcatgtctt tccctctgct gatgtgcttc ctagttagt atctgttgct tggttttggt 420
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<210> 11767
<211> 469
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-032-Q1-E1-F8
<400> 11767

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aagattgtcc acatcaagcg tgccgacggt gaagcatagg ccaagtacct gtctggcctc 180
ggtatcgccc gccagcgcca ggccattgtg gatggcctga gggacagcgt cctgagcttc 240
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tacttcgata ctatgagaac atattggcgc gtcctccaac tcctcggcgg tgttcatcac 360
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<210> 11768
<211> 463
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB31-032-Q1-E1-G5
<400> 11768

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 acgatgttgg acaagcttct cctcaattgg tgctaccctg actctatctc gtatatctca 180
 aacgatgttg gacaaccatc tcaactgttt gcttctagtc atggaaacta aataaatttt 240
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 agattttttg aatgctctgg cagctggaaa gtgatgttac attcaggcct ctaacatggg 360
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<210> 11769
 <211> 465
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-032-Q1-E1-H1
 <400> 11769

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 aaaatactta agaaaccaag tcagactact cattgttatc aacataaaca taaattgcac 180
 aataattttt gttattgtac taaactttta ctagtgatat agcaataagt aacagtaata 240
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 aacgatacca caatgacaga ttacggaatg cacgcttata taaacataga caatcgggca 420
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 <223> Clone ID: LIB31-032-Q1-E1-H3
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atgggaagca cgagtaaaaa tgaacttgcc aaaatttaga acaacaacaa aatccaatat 180
tttcaatgaa aacagaaaaa aaaaatctag aaccactact cctccccctg taatgcaatt 240
ggaggagata aagaaaatcg atggaaccgc tactttcatt cacgctctct tcaattctag 300
aatggatcta gctgtcatcc tctttgtggg tctaaaatat gaataatgat aagcataaaa 360
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tattcttagg aacaaataag aaagataaat ggagaaggaa aacccaaagc aatgtcagag 180
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gccggactcc tcgcagcccg gtggcttgaa ggcgatgaag ctgacgcaact gcacctggcg 300
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<210> 11772
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<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-032-Q1-E1-H7
<400> 11772

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agattgtgat gggcctcgag gaagagttca acatcacctg cgatgaaaca agcgcgcagg 180
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tcgttgctta ggggtaataa 440

<210> 11773
<211> 399
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-032-Q1-E1-H8

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tccacttggc ctattcgggt ggggtcaatt gtgtaattcg cccagtgcag ttaccgcatg 180
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<210> 11774
<211> 456
<212> DNA
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<223> Clone ID: LIB31-043-Q1-E1-A1

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gtgatgttca tgggtgcctag tttatcatac catcat 456

<210> 11775
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ctgggttttca caagagaaaag aagaagagga gaaaggaggc gcagaagatt acgcaggag 239

<210> 11776
<211> 405
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-043-Q1-E1-A6
<400> 11776

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cccggagatt tgatggggaa catcttgaat agagcgtcct tcaacttctg ttgcgtataa 180
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ttttccatct catcattatc ctccgagaga ctgccatctc tgcgcatcaa agctttaage 360
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<210> 11777
<211> 382
<212> DNA

<400> 11779

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attcgccaca tgatatgtgt tttgcttgga gcgtcttgta tgatattggg ctttgatttt 240

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<210> 11780

<211> 362

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-043-Q1-E1-C3

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aacttctctg tgccttactt tcccgagtaa gtctctctct caaccggccc gtaacatatg 180

aattctctaca ttctgatcgt ttttctttta acattccgtg ttttcagcag tgacacacgt 240

tgcacgtcga tctctcttag ccccaaatat tccatggcca cgtatttcga cctgaacat 300

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gc 362

<210> 11781

<211> 462

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB31-043-Q1-E1-C5

<400> 11781

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 aaaatttga ccacagcatg ttgatgccgc tccataatag catgccaaagt ttcatgaatt 240
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<210> 11782
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-043-Q1-E1-C6
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 taaacaaaac ccaaagtcta aacggtgccc taagggtctg atatatggag gaagagaggg 360
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<210> 11783
 <211> 459
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-043-Q1-E1-C7
 <400> 11783

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<210> 11784
<211> 468
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-D1

<400> 11784

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ctgttcgacg ttgtgtccag gctgatttgc cgggacaccg ttaagttaa gctactcttt 420
tcctcaaaaa gtggacacac aaattttgcc gaaaaaagaa ggagcaaa 468

<210> 11785
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-D5

<400> 11785

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aaaagccaca aaaaaaatta gggttagttc atcatatccg aaccaatctg agcctttgca 240
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 gtcttagagt ctagtcgttt agagtttcga gttctgggtca taagttgtca cgccgccgcc 360
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<210> 11786
 <211> 404
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-043-Q1-E1-D6
 <400> 11786

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<210> 11787
 <211> 463
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-043-Q1-E1-D7
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<210> 11788
 <211> 432
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-043-Q1-E1-D8
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<210> 11789
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 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-043-Q1-E1-E3
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<210> 11790

<211> 473
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-043-Q1-E1-E4

 <400> 11790

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caatacgatg tacacacaca tttaaatttg gcaacacaaa gtttccaatg aaa          473
  
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<210> 11791
 <211> 374
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 <213> Triticum aestivum

 <223> Clone ID: LIB31-043-Q1-E1-E5

 <400> 11791

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<210> 11792
 <211> 452
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-E8

<400> 11792

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<210> 11793

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-F3

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<210> 11794

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-F6

<400> 11794

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<210> 11795

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-F7

<400> 11795

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<210> 11796

<211> 338

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-043-Q1-E1-G7

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<210> 11797
 <211> 460
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-043-Q1-E1-H5
 <400> 11797

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<210> 11798
 <211> 429
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-043-Q1-E1-H6
 <400> 11798

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 tgggctggta aggcccaggt gacttatcaa cgagcccgtt gccaaaggcaa agcaacatct 120
 atatacatat ttagcttatt aaataccact caaaaagtaa acttaactta ttaaatttgt 180

ctcaaaaact aaacttaact tactaaattc tgcttaaaaa cctatcttat taaattctca 240
acaggatacc aacttagctt attaaagagt tttcttaact gaacttaata aagagcgaac 300
gtaggataaaa acagatgatt ccaaaacaga gtgaatgtcg gaataaaaaa aaacgggggc 360
tctagaggat ccaggettac gtagcgttca tgggacgtca gagctcttcc agaaggtcac 420
ctaaagttc 429

<210> 11799
<211> 378
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-043-Q1-E1-H7
<400> 11799

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tagtttagat cgagtctgtt cttcatacct acagtccacg aaaaagccac aaaaaaatt 180
agggttagtt catcatatcc gaaccaatct gagcctttgc ataactttt tagggttttt 240
gctttgttga atttgcggt gcacgtcgt gtcaagttgc tggctctaaa gtctagtcgt 300
ttagagtttc gaggcttgg cagaagttgt cagccgcgc gcgcaccagc atcatcgctt 360
tgccatcgaa cagcattg 378

<210> 11800
<211> 370
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB31-043-Q1-E1-H8
<400> 11800

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ggacggcgcg cgatcgcat agggttcgtc gtcattgggt tcgtcagcat cttcgccag 180
ctcatcttca tctacaccag caacatcagc gtcgggtcca gcaatgttgg acgacaggat 240
taccagatgc ggggacatcg tgatcccgcc aattgagccc gcggtgtgtc catgtacgcg 300

cccaaagttt gttctgaact tgttgtaga gacctgactt gtgagacatt gtcaactatct 360
tcatcatcct 370

<210> 11801
<211> 332
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-A5

<400> 11801

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ctttaccttt gtaacgtatg ctaattttac aagcccgatc attctgactg tgtgtcacat 180
gcctatgcat ctgaataaag gtttcttcat cgaatccata tccatcactg acatcatcac 240
ctcaatcaaa tcatgttgca acgacatctt tgttccactc ccagtcatgt cggcattatc 300
tactgtgaac gattccatcg ttgtggctac tc 332

<210> 11802
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-A7

<400> 11802

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aagcgaggga gagtgcgga cagagacatg aactgattga ccgcacgcga ccagcgagtg 120
gataatacag cgcgatgcgg gctgggctca ccagataaca ggtccaagag cttaacgggc 180
accacatcga gcccaggagc gaatcggctg accctaaatt ggggccagtc aaccaaacc 240
agcccaacag agccacgttc acacccatag aaaagaaaga aacacatgaa tctcaaagca 300
tgatccaacg gccaaaaagt tcgactaacc acaattctaa actcaggcga ctgtcatata 360
gctaaagtga acgtgtgtac aatgtaaaaa aatgtttgtg tgttgtaaaa aaatgtgtca 420
ta 422

<210> 11803

<211> 394
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-044-Q1-E1-B2

 <400> 11803

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 tcagaattca gaagccgagc tttggcgaac ctggggcact gcggacgtga cgagagaata 180
 ttagcagcat cctgggtgat ggcgttttagc gtgcgtgggt cggggaagat ggagccttcc 240
 tctggctggc tggttggaat ttcctttcat ttcagttaaa ggcaaaacaa atgaatggaa 300
 tattegtatt ctgctgctcc tttgcagcta ttctccgcga atcctttctt cttctttttt 360
 tcctttttgc cgtggcagcg taagtgggac tggg 394

<210> 11804
 <211> 424
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-044-Q1-E1-B7

 <400> 11804

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 acccagaaat ttggtgtcca gaaggcactt cagaagaatt tccggaaata catgacgtac 120
 aagaaggatt acaatgaact gcttctgctc cttctgcgca ccctgggtcaa ggagggcgctg 180
 cactttgaag aaatcgtgtc gggatcaacc gcacgcctga ctcatgtgga ggttaaagtg 240
 gatgacctga agaacaaggc ccaagagtgt gagatctacg acctgaggcc gttcttctcc 300
 agctcgact tcagcgacaa cagttttgtc ctggacgaag gacgtgggat catcaggcat 360
 ccagttgcag cataacaact caatcgacct cagctgantg accatgtgtg atgaacagct 420
 acct 424

<210> 11805
 <211> 414
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-C6

<400> 11805

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tgagattcta ccggtgtggg cgtgtgcccc ctctcggaag tcccagccgt acgacaagca 120
cagggctccg cggcctcgca agggactctt cagctgctgt ttctgcaaga tcaggccgga 180
ctgcagaacg aaagctgacg ctgtgtacag gtctgaaacc caggaggtgt tccatgggta 240
gcgagcatgt tgtagcttaa gttaggagag atgagcaccg ttgaaacaag gctgataatg 300
ttctatcatt ttggtacgga tgtgggtggc caaattccat tggaagttag atcaatttag 360
gcgagtcttt gaactgcagc ctgctcctga gttctgactc tagatgtgca tcgt 414

<210> 11806

<211> 403

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB31-044-Q1-E1-C8

<400> 11806

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ctacttgtca cggacaatac acatgatcat gcctagatat tctcagaatt attcactttt 120
ctatcaattg ctcgagggta atttgttcac cctccgtaat acttatgcta tcttgagaga 180
agccactagt gaaacctatg gccccgggtc cattctccat catacaagtt tccaatctat 240
tttattttgc aatttttact ttcaatttat atcataaaaa taccaaaaat acttatctta 300
ttattatcat ctctatcaga tctcactctt gcaagtggcc gtgaagggat tgacaacccc 360
tttatcgcggt tggttgcgag gttcttattt gtttgtgtan ggc 403

<210> 11807

<211> 399

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-D4

<400> 11807

attcccaggt cgacatagct aaaacactag gtgattaaac cgaatcacac agaacaaggg 60
 agtccttgct ctgataccaa ttgaaagtgc tagttatcga ctaggggggg gtgaataggg 120
 gatttttatg aaagtcttca aaacatgaga gttttgtaga aaaacaatag aaataaacct 180
 attgacatgc agcggaaggt agactacact agacaagcca tagccaagta ctcaatgaac 240
 tgaaaacacg aagactatta gcagctaggt agtatggatc aggatggaag atagtgtgaa 300
 gccaaactac attagtcatc acacagtgaa gtcaaacaga taatgcaagc aggcaatgac 360
 ttcacaagga caaactgtaa gtaaagagaa gtaagaggt 399

<210> 11808
 <211> 418
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-044-Q1-E1-E2
 <400> 11808

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 tcaagcgtgc cgagggtgaa gcagaggcca agtacctgtc tggcctcgggt atcgcccgcc 180
 agcgccaggc cattgtggat ggctgaggg acagcgtcct gggcttctca gtcaatgtgc 240
 ctggcaccac tgcaaaggat gtgatggaca tgggtctgat caccagtac ttcgatacta 300
 tgaaagagat tggcgcgtcc tccaagtctt cggcgggtgtt catcccccat ggccctgggtg 360
 cgggtgcgca catcgccacg cagatccgtg acggtcttct tcaagggcaa tctgcctc 418

<210> 11809
 <211> 416
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-044-Q1-E1-E4
 <400> 11809

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 ggcgccgtac ataccgtgct cacggacgca tcaatcctta catgtccaac ccctgccaca 120
 ttgagctgat cttgtcagag aaggaagagc ctgtgaagaa ggaggctgat aacgtcgtcg 180

caccaaggaa aactatctaa gctaccggaa tggatgcatt cgtccaacag tcttagttgt 240
 agttcttctc aagtaccttt gttggcagtg tttgttgctt ccttgatgtt tttgttacca 300
 acattgagta aggatttggt aagggtgatg ctatccttgt gattgcgagt ggtctttata 360
 tgctaaaaca gtttcagata tttgagcatt agcacaccag aacttatttc tcagag 416

<210> 11810
 <211> 413
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-044-Q1-E1-E5
 <400> 11810

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 tcgtcgccgc caagacatca acaatgccgc ccaagcctcc caagaagccc aaggcccaga 120
 agaaagagta cgacgagacg gatctggaga acttgaagaa gaagaaagag gacgagaagg 180
 ccgtcaagga gctcaaggcc aaggctgcgc agaagggccc gctcggaggc gccggtctca 240
 agaagagcgg caaaaagtga tctgctcgtt ttccaaaact tattgtctgt acttagaaag 300
 cctctgaaga aaaatggccc acgaaaaact actttagata gttgattttg gtccagtgtt 360
 tggggctctcc ctttcgtgta tgaattgagt ttttgacgac actaagccag aaa 413

<210> 11811
 <211> 428
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-044-Q1-E1-E6
 <400> 11811

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 ggtgatcact gaagagggtt tacaaaccat attggataag ctgcgtgttc aacaccacta 120
 ttgcctttac tgtggatgca agaaatgtag ggaaaggctg cgtactatag acccaaagtg 180
 gtcggaccct tccctggacc ctgcgcaagc gggagctaca tgcaccagtt tgaatcagca 240
 ggagcactgg caaatgaatg ccctgggcct aatgaagatg atcactgatc cactctgtca 300
 atggtgacaa gggcactgtc cttccactg cagattatgg taaatgtgac atttgggata 360

ttcttgatta gttgactgtg tacgggtaac cttagtcctt aacacaatca ctgggtcata 420
gccaactg 428

<210> 11812
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-E7

<400> 11812

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atggcagcag accagttttt tttcttttcc tgcattgtgtt tttcttttct tttttatttt 120
cttttagtatg gatctatctc tctgatcaag caagaagaga tcggcagctc cagcgacatg 180
acgagccgtt tccgggtttt tatgaaggga actatttggg gtcgcgcgga agcaaaacta 240
gctaggggtt attagtgtcg ctctagttcc gcttgctatt cctttcgctt gttcgtttgt 300
ttctttaagg attttattat caagggtgta aggctgggga tgtgcagcta gcttcagatt 360
caagcctgcc gtctcgctcg cttgtacatt g 391

<210> 11813
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-044-Q1-E1-E8

<400> 11813

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ggccacccca agactgagtg aagataaggt taggcaatgt gttgactcaa gacttgaggg 120
ggactatcct cctaaggctg ttgcaaagtt tgcagccgctc gcggcattgt gctccaata 180
cgaagccgac ttccggccaa acatgagcat cgtcgtcaag gcgctccagc ccctgctgaa 240
tgcgcgagca gccaccctg gggctgagca tgccggacgc taagctccac tccttgatatg 300
atataataga taaggaaaaa tgagccatca attgttggtc ttgccgggcg cgtggcaagc 360
ggtttttgta catttgatgat tattcttccc aagttgtaac cctcgagatt ctagtaccag 420
aaata 425

<210> 11814
 <211> 110
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-044-Q1-E1-F2

 <400> 11814

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 aactataggg tgaatattca aaatagtcac gaatttgaaa aatacattaa 110

<210> 11815
 <211> 416
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-044-Q1-E1-F4

 <400> 11815

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 gccagccctc cgattgcggc ctctcccgcg aggactacct cgagtgcctc caccactcca 180
 aggagtcca gcgcaggaac aggatctaca aggaggagca acgtcagata agagctgctg 240
 ctgcgaaggg caaggaggaa gccgaaggag ctctgctgt tgcagctcac cactagcatc 300
 cgtttttatt tgctgcaagt gcttccatgt tcggctatga gcaaggcaat aatttcttaa 360
 acattctacc ctccactcc atgacttggt ctaaaatcat gagttcgata aacaac 416

<210> 11816
 <211> 432
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-044-Q1-E1-F6

 <400> 11816

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 gtttttcgta gtttagatcg agtctgttct tcatacctac agtccacgaa aaagccacaa 180

aaaaaaatta gggtagttc atcatatccg aaccaatctg agcctttgca taatcttttt 240
 agggttttgc tttgttgaat ttgctgttg atcgtcgtgt ctagttgctg gtcttagagt 300
 ctagtctttt agagtttcga gttctggta taagttgtca cgccgccgcc gcaccatcat 360
 catcgcccct gccatctacc accaccgctc cgaatccgta tccatatacc aacaacaatc 420
 cgtgtccata ta 432

<210> 11817
 <211> 427
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-044-Q1-E1-F7
 <400> 11817

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 ttgaggaaag agttcttagt aaacagttga gaacttctgt atatctccat atggcattgt 180
 agaacttaaa aggtgattta caaagaagtg atttacacc tctctctgct atctataaaa 240
 attgtgacaa tggaagcttg catttctcca tatcaagaac gggagtatag attctaatacg 300
 cagagatttc tctcttttac agcgagggtca tgttccatct gagccttgct acatactgcg 360
 attctaatag catcttcttc cttaaatacta acagctcgat tcctcgctcg tacataagaa 420
 ggcaatg 427

<210> 11818
 <211> 389
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-044-Q1-E1-G3
 <400> 11818

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 acattgttga caccttccgt cttcaggagc aaactgcttt tgacaagaag cagtttatct 180
 ctcacatgaa gcgctacatc aagaacctct ctgccaagct tgaaggggat gacctagatg 240

ttttcaagaa gaatgttgag tctgccacaa agtatcttct tagcaagctc aaggaccttc 300
 agttctttgt tggcgagagc atgcatgatg atggcggcgt ggtgttcgcc tactacaagg 360
 agggagctgc tgateccaact ttctgtac 389

<210> 11819
 <211> 419
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB31-044-Q1-E1-G6
 <400> 11819

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 ccgcacgggtg ctctagtttg gaccaacact tagacaagca ttgtcccagg ggggctaaaa 180
 taaagataac cctcagggtta attactccca agggaaaggt ttaagtggta tgcaaagtgt 240
 aaaaccaatg ttgggccttg ctggaggagt ttattcaag gcgaactgtc aaggggggtcn 300
 cataaatcac ccaaccgcgc aaggagcgca naatccggca acataacacc ggtatgacgg 360
 gaactagggc ggcaagagtg gaacanaaca ccaggcataa ggccgagcct tccaccctt 419

<210> 11820
 <211> 431
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-044-Q1-E1-G8
 <400> 11820

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 tcagcactcc aagtacttct gtgagttctg cgggaagttt gctgtgaaga ggaaagcagt 180
 tgggaatttgg ggatgcaagg actgtgggaa ggtgaaggct ggcggtgctt acaccatgaa 240
 cactgccagt gcagtactg tcaggagcac catccgtcgc ttgagggagc agactgaagc 300
 ataagttgct accggcagtg ttttgtcta aggaattatc tgttttttgc agtttagacg 360
 atactttgga ttcagttctg ttggctgttt agtcaagggt atctttgtac ttggtgccat 420

ggatggtttt g

431

<210> 11821

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-A2

<400> 11821

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gcgggagatc aaggtgcaga agcttgctct caacatctcc gtcggggaga gcggcgatcg 120

cctcactcgc gctgccaaagg tggtggagca gctgagcggg cagtcgccag ttttctccaa 180

ggcgaggtac actgtcaggt cttttggcat tcgtcgtaat gagaagattg cctgctatgt 240

gacgatcagg ggtgagaagg caatgcggct tctcgagagt gggctgaagg tgaaggagta 300

cgagctcctg aggaggaact tcagtacac tggttgcttt gggtttggtta ttcaggagca 360

cattgatctt ggcatgaagt atgaccatc aaccggcatc tacggcatgg acttctttgt 420

tggtctggag ccagctggat accgtgtc 448

<210> 11822

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-B3

<400> 11822

cgctgccgt caccggtgcg agaattcccg gatcgacgct gccattgcta aagccaagga 60

aagtcctatg cctgatgctt ctgagctctt tacaaatgtc tacgttaagg gtttcggcgt 120

tgagtcattt ggcgagaca gaaaggagtt gagagctaca ctcccatagg tcaccaacct 180

gaagatgaag atgagtactc ttctaacacg ttgagatata gaggagaaat aagcatcagt 240

gaacaaaccc ttgggtgttg ctggcagttt ttgttgcaaa acgaacctgt atagagatgt 300

gatgtcaggg gaattcgttc cttatttggt ttgttttctt ttttttttct tctgcaattc 360

agtttaactg ctgctggctg gcttcctatt ga 392

<210> 11823
 <211> 437
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-047-Q1-E1-B5

 <400> 11823

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 cgtaacaaag agtggtattg ttatcttctg cacatattac atcctgcttg cggaatttgg 180
 cacatcgtgc tcgagtacaa atttgaaaag ggagcaggag acgaaaagaa tgacatttct 240
 atagtatata aaaagggagg agagagaaaa aaggtaaaac tatggatcca cgctattgta 300
 cagttatgct attagggggg tggttattca caagcagtgt cacaagatgc tgccaccaa 360
 ccataggtgc aggaagagcc aatacgccaa ggtcctagc cttgctcgcg gccgggttcat 420
 cagaatttgg ctccctg 437

<210> 11824
 <211> 200
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-047-Q1-E1-C1

 <400> 11824

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 atgtcatgct ccagacatgg acatgtgcc caagaacttc aaacgacatt cccaggttga 120
 catcgagatt gacatcaagc gtatcccaa tacggtaact ttgattcagg acatggatga 180
 accacatgtg aaccccaa 200

<210> 11825
 <211> 381
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-047-Q1-E1-C2

 <400> 11825

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ttgggcagcg ctgggggaccg gcaaatacgcg agttcttacc tcgaacgcgt cattctggca 120
 aaccaggata aggagaactt cctcgtgccca ttactttctc gactaagtcc tccccacaat 180
 cggaccgtaa catatgaaat catacatttt gatcgggtatt cgtatagcat tccgtgtggg 240
 cagcagtgcac atacgttgca gggtcacctc catacgtcca atataatcca atgttacctc 300
 tatatactcg gaccgtcact cgagagtaca cgagacaaaag gtcaacaagg ttctgatga 360
 agttcacccc ggctacacac a 381

<210> 11826
 <211> 302
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-C3

<400> 11826

cgctgccat taccggtgcg agaattcccg gatcgacttc caccaaagcg atatccatca 60
 tctcatcgaa agacgggaca cttttgcctc tatcaagtgg tatcagattt ccagggttgct 120
 cgggtgagatt ttacagtttt tcgtagttta gatcgagtcg gttcttcata ccaatagtcc 180
 acgaaaaagc cacaaaaaaa aatttagggg tagttcatca tatccgaacc aatctgagcc 240
 ttgcataatc tttttagggt tttgctttgt tgaatttgcg gttgcatcgt cgtgtcaagt 300
 tg 302

<210> 11827
 <211> 307
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-047-Q1-E1-C4

<400> 11827

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 tcggcgttcg cgaatactta acacacttaa cgagatcttg gtatttgatc tgagtctggc 180
 tactggctat acgcactaac catctacacg gggacattta tgggcactcg acgtcgtggg 240

atcagctgaa gccttcgtga cgtttagcgac tgagcggcgc ggcgccaggtt ggaccgcgta 300
acgcaac 307

<210> 11828
<211> 380
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-D1

<400> 11828

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aagccatgac gtctacacgc acatatttgg agcagagctc gcaacatata tacaacatat 120
aagtagagag attatgggtg ctgcgtatca gtatatatag attattaccc cggaaaagaa 180
tatagattat tctataaggt tactctatag atgaagaagt aattcatcag ctctagctaa 240
gctgggtata gaacagcagg tggtactgaa tatccgatct atgtacatgt tgtgtaatcg 300
agattattgt gggaatatgc taatctcctg aaaaaaaaaa aagaatggta gggaaaagaa 360
agcggccgct ctagaggatc 380

<210> 11829
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-D3

<400> 11829

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gagtgttaca agaaataggg tggctaaact gacaatgcc gtcttctactg ccgtcttgggt 120
gatggccctg ttgatcactg catcatcttc aggagaagtt tcaacgacag aacgtgatag 180
ggatgcctcc aaagtgacaa agggtcacac ttctctttac catcttcaga tgcagagcca 240
cagcaggatg aggattctga cggattttct ggactacgac tacggaggag ccaactccaa 300
acacgatcca cacaggaggc ccgggaatgg gggacattag gcactagata atagctagct 360
ctcccaacca ttcgacagag tccggtgttt tggactgggtg tcatgtgtgt gcgtattcac 420

<210> 11830

<211> 363
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB31-047-Q1-E1-D4

 <400> 11830

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 aacccccctt gagcattctg atatcgccca tttcttttccc tctcatgctt gcattagaac 120
 tgctactgct ttatgtatga tcctactctg atgcatagcc tgttttggtta cctgctttca 180
 taccttacct gcttataccta aactgcttag tatagggttg atactgatcc atcagtgacc 240
 cccaccttgt ccaagttgcc tcgctttatg ttagatgact cgatcaacgt gatcgatgtc 300
 caggccccga caccgcacat ccccccccc ccttagttgt aggactctgt acagttacca 360
 tcg 363

<210> 11831
 <211> 425
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB31-047-Q1-E1-E1

 <400> 11831

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 caggcgatga atgagatcaa tgcagctgca aggatgaggg tggctgcaaa cgagaaggcg 120
 gaggtgaga agattgtcca gatcaagcgt gccgaggggtg aagcagagggc caagtacctg 180
 tctggcctcg gtatcgcccg ccagcgccag gccattgtgg atggcctgag ggacagcgtc 240
 ctgggcttct cagtcaacgt gcctggcacc actgcaaagg atgtgatgga catggtgctg 300
 atcaccagat actttgatac tatgaaagag atcggcgcat cctccaagtc ctcggcggtg 360
 ttcaccccc atggccctgg tgcggtgcgc gacatcgcca cgcagattcg cgatggctct 420
 cttca 425

<210> 11832
 <211> 413
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-047-Q1-E1-E3

<400> 11832

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 ttgggcagcg ctggggaccg gcaagtcgtg agttcttacc tcgaaggcgt cattctggca 120
 aaccaagata aggataactt cctcgtgcct tactttcccg agtaagtctt cccctcaacc 180
 gccccgtaac atatgaattc ttagatttcg atgggttttc ttttaacatt ccgtgttttc 240
 tgcagtgaca cacattgcac gctcatcctc ctaagcccca aatattccat ggccacgtat 300
 ttcgaccgg accgtcagtc gaacatagac tacacaaatg tcaagaaggc tcttgatgat 360
 gttctccccg gctacgtcaa atctggaggc actttcaaca ggctatttcg taa 413

<210> 11833
 <211> 434
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-E4

<400> 11833

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 cgtagatgga tgtttatgtg cggcaaatac caagggtgat gcatgcgcgt gttttactta 120
 tgggtatgtg tccctatttt caagagtcac gtacagatag agattgtatg catcagatca 180
 gatcgtaatt cttatctcaa ctttttaaca tgtacgtaaa actcaaaata tagttacgac 240
 ccaaccaaag ttattccttt taccggatct atctattgaa caattaaacc tgcacatttt 300
 gtgaaactag caacaagccc ggatcttgtg gttcaacata aatcttgcg gagtaacatt 360
 taattttgat ttgagcatgg gtactggaag acaagtaaag tttcatttag ttgagattac 420
 cgtatgaaat attg 434

<210> 11834
 <211> 428
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB31-047-Q1-E1-F1

<400> 11834

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tgagtactgc aagaagcacg tccaggccag ccccaaaccg gctgactccg gcgccgtcac 120

tgacgccaac tctccacct cactgcagc cgccgcccc gtcgaggacc tcaagagctt 180

tgacgtgag tttgtcaagg tcgaccgggc caccctcttc gacctcatcc tggctgcaaa 240

ctacctcaac atcaagggat tgctcgacct tacttgccag actgttgccg acatgatcaa 300

ggacaagact ccggaggaga tccgcaagat ttttaacatc aagaatgatt tcacacccga 360

ggaggaggcg gaggtccgca aggagaacca gtgggctttt gagtgaaagt agtagcatct 420

aggcaatg 428

<210> 11835

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-F3

<400> 11835

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tcategacaa gctcgagctc cagcccatgt tcgtcgcaaa ggaaatatcc tccagctgga 120

ctcacaagac agagcatttc caaaagatcc acagaaaaac tgggggttcca tacaagtcca 180

tgccgttctt tgacgatgag gacaggaata ttcaatcggg atcgaaaatg ggagttacga 240

gtgtttctagt aaacaacgga ttgaatctcg acatgtttta gttggggctc agtaatttcg 300

ctactactgt tgctgcatct gaacccgcac ctgcaccaga ggacaattaa ccttatattg 360

tacaagtaaa aacagcagac agggaaaacg cccatgattt acgggatacg tgtggaaaaa 420

taaac 425

<210> 11836

<211> 397

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB31-047-Q1-E1-F6

<400> 11836

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 tcatcgaaaa atcaggaccc tcgcctctat caagtggat cagatttcca ggttgctcgg 120
 tgagatttta cagtttttcg tagtttagat cgagtctgtt cttcatacct atagtccacg 180
 aaaaagccaa aaaaaaaatt agggtttagt cagcccatcg gaaccaatct gagccttgca 240
 taatcttttc tgtatttgc tttgtgaatt tgcggttgca tcgtcgtgtt cagttgctgg 300
 tcttagcgtc tagtctttta gagtttcgag tttctgttcac aggttggtcac gccgtcaccg 360
 caccatcatc atcgccctgc caactaccag cagcgct 397

<210> 11837
 <211> 429
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-047-Q1-E1-F7
 <400> 11837

taccggtcca gaattcccg gtcgacttcc atgtggatgg gaaaaagaaa gtacaaaaac 60
 tataaaataa aataaagtta aataataaaa ttccccatat tatgcgtgtt tcgatctcat 120
 cgccgcacaa gtctcatcac aattgcagac gtgttttacc ccttgagtcg cacgtagttt 180
 gagatgcacg caattgcata cgtgttgac cctcgtagtt gcatgaattc cgatagttct 240
 agttgtacgt aagggaaca agagtttttg tgacaaataa aaagaaaagt caacaatttt 300
 tctgtcaacc tgatgtagga aacatagggc atatcaacat tacgaaaata tattcctggg 360
 taatacatga atgaacaat tttttttaga aaaaagaaca ggcaacatac aaataaacia 420
 aaaatccat 429

<210> 11838
 <211> 456
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-047-Q1-E1-G1
 <400> 11838

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 ctgagacggc tgttcatgta cataaacaag ctccctctga tcgtgcctga tgtcatcttc 120

agtgtctacg attccacat aaaatgaatg gtgcggcact ccccttatca aggtcctcag 180
 ccaagtgtccc agctcctttt aatctatttg ggaagctccc ccaagctctc tggtttccat 240
 gcctgtaccc aagcccttcg aagtgcctga actgtcgcac ttgtagtcgc aaaccttttg 300
 tttgtgcttt agatcttatt tagtgcgtag ctgcatgctt aagctaagca tatccagcca 360
 gtttgtatat atctcacatg gctctgttaa tagagaactg tagctggccc caaatggagg 420
 cgggtgctgtt taatatcctc ccatgtcccc ccccc 456

<210> 11839
 <211> 442
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-047-Q1-E1-G8

<400> 11839
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 ttctgtagtt aaacctgagg agttatgtga atcagcgcac ctctgcccaa agggggcagc 120
 gactcggctg tccacacgag gggatgcctg tgggtctatgc catcatgttc ttgttgagggt 180
 tcttatgatg cttaaggatc ccaacaccaa gctggagata gtccgggttc ttttcaaaac 240
 atgcagcaag gcgaagaact acgaaccgca gtgcaagagg cttgtccttg actacatccc 300
 actgattctg gtgaagaccc aggagttcct tgagacgacg gacgtctgct ttgcgacaca 360
 tgctgtaaa acatgcatgc aagcaaccat tcctctctcc gccgctttgt gaagaacaaa 420
 tatgttgggg atatacaggg gc 442

<210> 11840
 <211> 454
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB31-047-Q1-E1-H3

<400> 11840
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 ttcgatccat cgaggtttgc agatggcaag agctaccacc ttggcgcgta cttccccctt 120
 gggattggcc ctgccatctg tgttgggcag aatctcgcga tggttgaggc aaagctggcg 180

cttgcaatgg tctccaacg gtttgcgctt gatgtctcga cgtcctatgt tcatgcgccg 240
atgaaggtga tgacctcca acccagtac ggtgctcaac ttcttgcca caagatctga 300
accttggtg gtgctgtcta tggagttggg aggtttggca gcaaggata tgtgaatgtg 360
atgtccccgc gtctcctgta tctctgttga caacttgccc gaagtttgtc ctgaaaatgt 420
gtacagaaag tagtatatgc ttgcgcacag taaa 454